



NEWave in Learning

Innovative programme for fast and effective learning



Co-funded by the
Erasmus+ Programme
of the European Union



HUMAN
RESOURCE
DEVELOPMENT
CENTRE



TRIAGOLNIK
CENTRE FOR INNOVATION, EDUCATION
AND RESEARCH

NEWave in learning - innovative programme for fast and effective learning
2016-1-BG01-KA204-02



Suggestopedia and NEWave methodology foundations 03

Chapter 1. Suggestopedia, desuggestopedia and reservopedia	09
Chapter 2. Human as a holistic being	40
Chapter 3. Human as a cognitive being	46
Chapter 4. How the brain learns fast	52
Chapter 5. Factors of educational environment	63

Upgrading theories 80

Chapter 1. Sofrology	81
Chapter 2. CLIL	89
Chapter 3. IKAB	103
Chapter 4. Psychological goals	114
Chapter 5. Temperaments	122
Chapter 6. Multiple Intelligences	129
Chapter 7. Bloom_taxonomy	137
Chapter 8. The Importance of Rhythm	149

Instruments for fast and effective learning 156

Chapter 1. Blended_learning	157
Chapter 2. Project – based learning	166
Chapter 3. Model of fast and effective learning	174





«I have always thought that we are, metaphorically speaking, fallen angels, locked gods, hypnotized souls who have believed in their limited bitterness. Moreover, they have resigned.... Nevertheless, I had a dream. In addition, this dream urgently whispered to me, she spoke, crying, "There is a method, there is a form of communication for "locked gods" and "hypnotized souls" who have believed in their innocence. There is! „This method, this form of communication will change things ... and we will all learn and develop much faster and more creatively ... and with joy ...”

Prof. Dr. Georgi Lozanov



OBJECTIVES OF THE TOPIC

Once you get familiar with the topic, you will be able to:

- To define what is Suggestopedia and Desuggestopedia.
- To define and to implement the basic statements of the Suggestopedia.
- To identify and to remove anti-suggestive barriers.
- To define and to apply the principles of the Suggestopedia.
- To define and to apply the functions of the Suggestopedia.
- To define and to apply the seven laws of the Suggestopedia.
- To define and to apply the scholastic pedagogic cycle in the suggestopedical area.

VERIFICATION OF THE UNDERSTANDING

In a group or by yourself, discuss and record the answers to the following questions and tasks:

- Do you know anything about Suggestopedia as a method of teaching? If so, what?
- Do you know which the homeland of this method is?
- In addition, who is her creator?
- List those specific features of the Suggestopedic Methodology of Teaching, for which you know something.
- What are your expectations for applying the methodology?
- What are your own anti-suggestive barriers?

CONTENT INTRODUCTION

Suggestopedia is a teaching system on which basis we built "NEWave in learning" - a methodology for quick and effective learning. Therefore, this section covers the most important things you need to know about the suggestopedical system. The section consists of the following chapters:

Chapter I - Historical Review

Chapter II - Fundamentals of Suggestopedia

Chapter III - Anti-suggestive barriers

Chapter IV - Principles of Suggestopedia

Chapter V - Equipment and methodology of Suggestopedia

Chapter VI - Non-specific factors of communication

Chapter VII - Suggestopedia's Laws

Chapter VIII - Suggestopedical course of the teaching subject – how it's made?



HISTORICAL REVIEW

Thanks to the dedicated work of Prof. **Dr. Georgi Lozanov (1926-2012)**, Bulgarian scientist -psychiatrist, neurologist, and physiologist of the brain, psychologist and pedagogue, as well as his team, a new science-**SUGGESTOLOGY** appears in the world. It was born in Bulgaria as an original Bulgarian contribution to world science. **SUGGESTOLOGY** is the science, which is studying the role of **suggestion as a means of communication** and the possibilities for its practical application in areas such as pedagogy, medicine, social relationships, art, etc. The application of **SUGGESTOLOGY** in pedagogy leads to the development of the **SUGGESTOPEDIA - a method for fast, effective and joyful learning**.

Prof. Georgi Lozanov published this term for the first time in Bulgarian in 1966 (Suggestopedia - a path to hypermnesia in the educational process, Narodna Prosveta, 1966, b, 23-41), and in English in 1967 (Suggestopedia and memory, Proceedings of the International Psychosomatic Week, Rome, 1967, 535-539). Georgi Lozanov defended a dissertation in the field of Suggestopedia, becoming a Doctor of Sciences, and later gaining a PhD degree. He has worked for many years. He was a psychotherapist in the largest psychiatric hospitals in the country. He did many researches on brain functions at the Bulgarian Academy of Sciences.

Following these scientific achievements of Professor. Lozanov, there was a decision of the Council of Ministers of Bulgaria on 10.06.1966 for creating the Research Institute of Suggestology with the Ministry of Education. Professor Lozanov led the Institute in the period 1966-1985, and it closed in 1992.

At the height of its development, the Research Institute of Suggestology reaches 100 staff (psychotherapists, physiologists, applied linguists, music experts, and pedagogues) and is equipped with the most advanced electro-physiological laboratory for its time. Based on state cultural agreements and agreements, the Institute for Suggestology also has Suggestopedic foreign language learning and experimental centers in other countries such as Russia, Germany, Hungary, Canada and others.

At the end of this period in 1985, Prof. Lozanov was released on political reasons and was given the opportunity to continue his studies in a limited area at Sofia University. Later, after the advent of democratic processes in Bulgaria in 1989 he went to Austria, where he worked on teacher training worldwide.

Suggestopedia has the strongest potential to develop in foreign language learning for adults, but experiments have also been made in school suggestion, especially in primary literacy.

Foreign language learning develops in a classical 100-hour intensive language course, the verbal learning of a foreign language by learners and their overall linguistic, psychological and social development. The first Suggestopedic course was organized in the autumn of 1964. The original character of foreign language courses is reflected in the publications of a number of established



researchers in foreign language learning and scholars such as Stevick (1992), Richards and Rogers (1986), Larsen-Freeman (1986) Underhill (1989), Cook (1991), Harmer (2001), Tomlinson (2011), and others. All of them recognize Suggestopedia as one of the basic methods of humanistic language teaching and as learning that corresponds to the main accents of humanism as a direction in pedagogy, namely the integrated intellectual development of the individual, the improved ability to self-realization and social adaptation.

Studies were also conducted during suggestopedical courses at the Institute of Suggestology, provided evidence for **the validity of the method of linguistic, psychological and psychotherapeutic level**. The most intensive forms of Suggestopedic language learning were conducted through various experiments. These findings and findings have been published in numerous scientific publications such as: Suggestology Problems, Collection of the First International Symposium on Suggestions of Problems, 1973; Journal of Suggestology and Suggestopedia, 1975, Lozanov, 1978, 1990, 2011, Gateva 1991). The results of Suggestopedic training are also presented at a number of conferences and symposia on Suggestology and Suggestopedia in Sofia (1971), Moscow (1974), Ottawa (1974), Los Angeles (1975) and others.

Suggestopedia as a pedagogical system is built on a number of theories and scientific experiments based on which is a systematized common theory of Suggestopedia. The results of its implementation can be achieved **as a system only if it is applied from highly qualified teachers who received special training of Suggestopedia**.

Conducted numerous experiments and studies have shown that the suggestopedical system of teaching influenced the learners in a positive way:

- **Discovers a reserve complex of:**
 - Memory reserves (hypermnesia);
 - Creativity reserve;
 - Reservations of the overall personality.
- **Accelerates the learning process**
 - From 3-5 times faster learning, thanks to the increased volume of content
- **Enhances the end result in learning the language**
 - An average of over 90% of the lexicon is enrolled per course, covering 2000 lexical units, with 70% of the vocabulary being active and the remainder at the transfer level.
- **It increases the capacity of short and long term memory**
- **Increases work capacity**
- **Increases the cultural knowledge**
- **It causes a psychoprophylaxie and a psychotherapeutical effect**



The psychological effect of Suggestopedia causes huge and very enchanting scientists and is perceived as teaching-healing methods.

- **Improves general health condition**
- **Normalizes the heart beating rhythm and blood pressure**
- **Improves the bioelectrical brain activity**
- **It results in a relaxation and fatigue effect**
- **Makes learning a pleasant experience**
- **Reduces aggression**
- **Increases motivation for further language learning**

UNESCO's international experts, who visited the Suggestology Institute as early as 1978, studied the methodology and results, and made the following recommendations, also recognized effectiveness of Suggestopedia:

- Suggestopedia is a superior method of learning for a range of subjects and different types of learners, compared to traditional methods.
- It's necessary to establish standards for the training, graduation, and maintenance of Suggestopedic training standards;
- Trainings of teachers according to the Suggestopedical methodology should start.
- There should be established an international Association of Suggestion and Suggestion for UNESCO.

"UNESCO concludes that the methodology should be supported, developed and disseminated throughout the world in the field of research and experimentation, teacher training and the establishment of an international association, an international Teacher Training Center and an Information Center. Their opinion is published in the United States (The Journal of the Society for Accelerated Learning and Teaching, Volume 3, Number 3, Fall, 1978, p.211).

Suggestopedia seems unique with regard to its global effect on foreign language learners. It increases the effectiveness of their lexical knowledge, reading and oral communicative competence, but also improves their health, intellectual, emotional and general working capacity.

How can this happen? What are the main principles underlying the Suggestopedic Method and its practical application?



FUNDAMENTALS OF SUGGESTOPEDIA

*"Suggestopedia is a method of opening the mind's reserves
Through love for human beings"*

Prof. Dr. Lozanov

Suggestology is a science of suggestion. The suggestion is a universal communicative factor that takes part in every moment of our lives. This is a non-clinical, unprogrammable, unmanifiable suggestion, which is to **"offer" the person to choose**, rationally and intuitively, from a wide range of complex incentives, orchestrated in accordance with the psychophysiological norms of the personality. Organized, orchestrated and harmonized offering incentives, that person perceives conscious and para-consciously is the brightest and positive form of suggestion. It can reveal all-round personal reserves.

Among the various manifestations of the suggestion Lozanov mentions: authority and prestige, peripheral perceptions, intonation and rhythm, ambiguity in communication, other **non-specific stimuli** such as gestures and posture, facial expression, eye expression, environmental factors, expectation by the recipient and others.

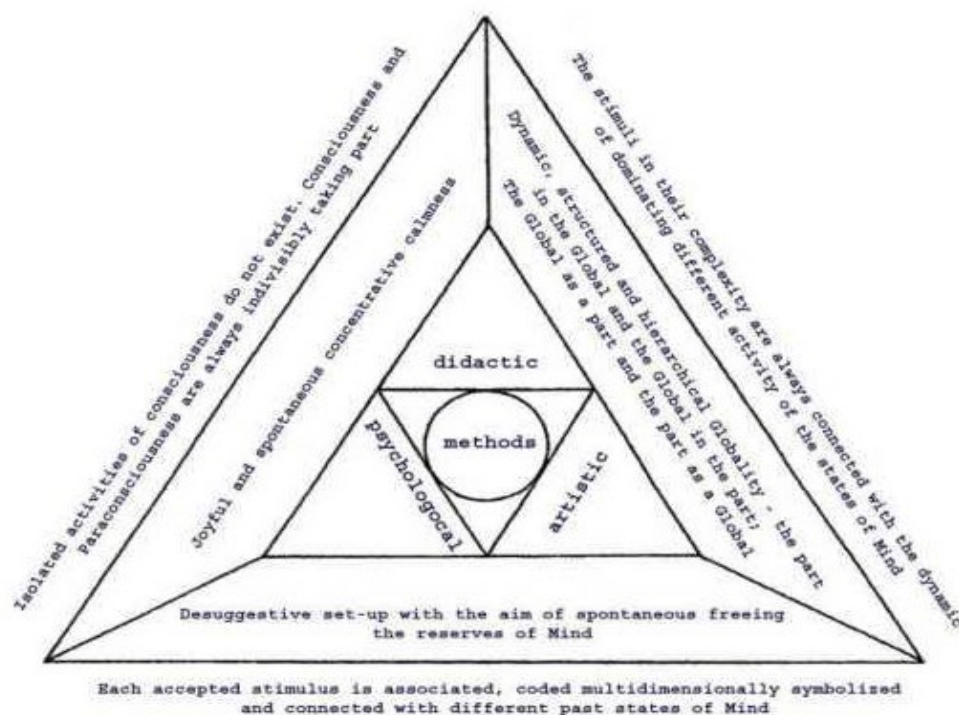
However, how can we master their power and use them wisely in the pedagogical process?

The suggestion is based on **suggestion**, and it is based on **three basic psycho-physiological facts**, which we will later call **Fundamentals of Suggestopedia**:

The first one fact is connected with the indivisible **unity of the conscious and unconscious** (paraconscious) **activities** of the human mind. Everyone communicates through both mechanisms simultaneously in every act of communication. Unfortunately, pedagogy has always been concerned primarily with the student's conscious mind and attention, ignoring the function of less conscious and subconscious brainwork.

The second fact is that the **complex of stimuli** that come into our subconscious mind **are coded and closely related** to previous stored information, **with previous states of mind**.

The third fact is that every stimulus is complex in nature (our **brain does not accept isolated stimuli**) and they are always related to the dominant states of the mind.



Prof. Lozanov is the first scientist to try to identify different subconscious factors, to activate the subconscious mind and to integrate it into the conscious activities of the learner. He seeks to restore the integrity of the human brain and **bring learning into line with the natural processes of brain activity**. It introduces the factors of suggestion into the learning process, the only goal being to accelerate the learning and deployment of human potential. For the first time, Suggestopedia deliberately introduces **alarge amount of information** into the study material, includes art in it (a specific type of holistic training) and successfully reveals the memory capacity of learners. For this reason Suggestopedia is alternatively called **a reservoir** (Lozanov), i.e. **Penetration into the reserves of the mind**. Prof. Lozanov alleges that his method of teaching not only covers one aspect, but also rather the entire **"backup complex"** of the trainee (see. The 'suggestopedic backup complex').



ANTI-SUGGESTIVE BARRIERS

Application of suggestions and suggestive stimulus in the pedagogical communication is inextricably linked **to the process of rejection of the suggestion (Desuggestopedia)** or the ability of the teacher to release the learner by the negative suggestion concerning their previous traumatic experiences **related to learning**.

Desuggestia began to be used as a term by Prof. Lozanov at a much later stage of the development of Suggestopedia. **Suggestopedia is a desuggestive pedagogy**, Prof. Lozanov says. Desuggestion is a reprogramming of the brain/ mind, which frees its reserves, i.e. unused brain/ mind capabilities.

For example, we have a traumatic experience of the long time needed to master each element of the material, the difficulties in remembering and learning, the difficulties in applying the knowledge, the difficulties in removing barriers and starting to speak in a foreign language, etc. The Suggestopedia teacher is trained on a humanistic (individual) approach to each student, how to show that he truly believes in his hidden capabilities, how to express his deep conviction that high scores will be achieved. These suggestions, which prevent us from uncovering the reserves of our mind, are the so-called anti-suggestive barriers that we raise against the positive suggestion organized and orchestrated in the suggestive system of teaching. The teacher needs to overcome them in order to reveal the reserves of the mind. He is trained to harmonize his positive **insights** and expectations with **anti-suggestive barriers** (G. Lozanov, 1971) of the trainees.

The human organism is in constant interaction with the environment. This requires cautious acceptance or rejection of the stimuli, incentives, information, generally speaking, influences and suggestions.

Biology examines a number of physical barriers that stop the infiltration of infections or certain substances in the human body. An example of this is the blood brain barrier. It prevents the brain from penetrating bacteria or microscopic objects.

In the same way, we define the presence of **anti-suggestive barriers** as a "filter in the passage of environmental stimuli in unconscious mental activity" (G. Lozanov, 1971). Very often, we are not aware of the information we perceive. Our focused attention is limited and has no capacity to check all the information we receive. Thus, parts of it do or do not quite realize or even not realize at all. It is precisely in such cases that automated **anti-suggestive barriers** trigger or even stop the flow of certain information and thus play the role of a psychic defense against harmful effects.



Barriers are categorized into three types:

- Critical - logical barrier (rational barrier);
- Intuitive-affective barrier (emotional barrier);
- Ethical barrier.

Critical-logical barrier (rational barrier)

The Critical-Logical Barrier “rejects everything that does not give the impression of a well-intentioned logical endurance” (G. Lozanov, 1971).

This is our protection against illogical external messages. Imagine being in Vienna and someone calling from Sofia. We are talking about something, and I say to him at one point: “After half an hour I’m with you.” That would seem strange to you - there is still no way to go physically for half an hour from Vienna to Sofia. You will probably think I am lying to you and you will be much more suspicious of what you hear from me then. That is, we have this logical barrier to protect us from people and situations in which the messages are vague and illogical, so that we can not be left misled and therefore make many wrong decisions. We need it most of the time.

Why then do we consider it an obstacle? Many times, we do not have all the necessary information and we need to make decisions in a situation of uncertainty. Then triggering this barrier may stop us from embarking on something that would potentially benefit us only because at the stage we are in, we do not have the reasonable logical justification for the solution. Sometimes this barrier is triggered without feeling it. Everyone around us, the experience we have, the media, all of us tell us that we have a certain limit and we can not master a lot of learning material at one time. This suggestive norm enters as our inner voice and if someone tells us: “You will speak a foreign language for a month,” our barrier is triggered automatically. Everything in our lives up to this moment, says that this is impossible. Accordingly, we release the barrier and go with that attitude. If the teacher wants to know in a very short space of time a large volume of material, we must first deal with these attitudes, lift the barrier, unlock our reserves, and then we will have the opportunity to save the large amount of material.

Intuitive-Affective Barrier (Emotional Barrier)

The intuitive-affective anti-suggestive barrier rejects everything that does not create trust and a sense of security. The irritants that have arrived in one way or another remain for the moment without consequence; the person often



reaches them with the opposite of the expected activity (G. Lozanov, 1971).

Once, long ago when you were 5-6 years old in the kindergarten, you drew an orange elephant that did not even look very much like an elephant. The teacher then told you that your drawing does not happen and does not expect you to become an artist because, here, even an elephant you cannot draw, not to mention that the elephants are not orange. This has happened to all the children in the group. They have laughed at you, you laughed, and you were in the mind, you never became an artist.

How many of us have a similar story in our lives - never become mathematicians, writers, or musicians because “this is not for you”. Gradually, this belief, especially if such events have been repeated, becomes a part of your internal dialogue. In time, you are convinced that yes; you will not really become an artist. What’s more, the moment they invite you to draw something, you start to refuse yourself, because memories emerge from emotional levels from these events. You no longer remember the exact situation, but the emotion is preserved. And you are all avoiding starting to paint.

Again, if a teacher wants to teach someone something, they first have to overcome this barrier and then involve the participant in the process. While the students themselves did not believe he was capable in this area until we get rid of unpleasant emotions associated with the object the likelihood to learn anything there is very small.

Ethical barrier

The ethical barrier is triggered “if the suggestions made contradict the basic ethical principles of the individual. It has been proved in experiments that suggestions that contradict the ethical principles of personality are not realized” (G. Lozanov, 1971).

While for the previous two, Lozanov proposes to work to overcome them, he definitely recommends not touching this one. In fact, many researches show that even under hypnosis, people who are tempted to cross their own ethical barrier have refused, and even come out of the state of hypnosis.

The ethical barrier affects our deepest beliefs about what is good and what is not. Sometimes, inadvertently, the teacher can bring down this barrier by affecting the beliefs of students deeply rooted in their culture about the role of women, for example. For example, learners who see that their teacher is not authentic, do not do what he preaches, and have a strong sensitivity in terms of sincerity, even if only because of this, they may not perceive what he/ she is saying. The suggestions made in the learning process are generally neutral with regard to the ethical barrier. We must be sensitive to instances where we may inadvertently interfere with someone’s values, ethics, or beliefs.



Public suggestive norm

This is the conviction in society with regard to any individual characteristics of the individual, but in the case of Suggestopedia, the public suggestive norm with regard to memory is particularly important. In most cases, we are convinced of the very low possibilities of human memory. Sometimes we assume that there may be hypermnnesia, but it 'is not for us', 'we are different'. These beliefs are supported by public speaking and the demonstration of low expectations to themselves and often to the trainees by the teachers. In Bulgaria, a symbol of this belief is the phrase "they are so able" or "such is the material". Politicians, supported by the media, speak it; teachers often broadcast it in classrooms. It is particularly worrying when it comes to separate groups divided by gender, ethnicity, age, etc.

Often the schoolchildren are treated with extreme mistrust, precisely because of this conviction. They feel low expectations and start to believe their limitations themselves. Therefore, we enter a spiral of self-prophecy. In other words, "the initial suggestion has become established in everyday practice, which in turn has created an additional suggestive reinforcement of the perception of the possibilities of memory that has become a social norm.

Maintaining high expectations and turning it into a suggestive norm in the learning environment requires a lot of energy, stability and confidence on the part of the lecturer but is crucial for the success of the learning process.

How do we overcome barriers?

"It is so much faster and easier to make a suggestion, the better it complies with the logical requirements of the personality, with its innate negativistic resistance, as an expression of affective vigilance, as well as with its ethical core" (G. Lozanov, 1971).

During the active research activity of the Institute of Suggestology, experiments have shown regular desuggestion and overcoming anti-suggestive barriers. Some research even notices at what times and at what stage this happens. A classic example of this is the experiments for learning a large number of foreign language words that have been held at the Institute. For one of them, Lozanov says, "And at the highest values, when the sessions exceed 1,000 new words in a day, the logical and the affective barrier have already been overcome, the students have made sure that this is already a completely new way of memorization, which actually results, and have left quietly on its course." (G. Lozanov, 1971).

One of the greatest merits of the Institute, which scientifically explores the suggestion, is that it manages to define and demonstrate the different means that influence and thus give the "prescription" that pedagogues use. The sug-



gestion is demythologized and lecturers can learn how to use it. "The purposeful use of suggestive tools in pedagogical practice, the deduction of the suggestion in front of the bracket, suddenly reveals the unexplained spare capabilities of human superior nervous activity in the process of learning. Most strikingly, these hidden brain reserves in past experiments are manifested in memory." (Lozanov, 1971)

Lozanov paid serious attention to analyzing ways to overcome barriers: "The negative barrier is also overcome not by deception or by violence, but by understanding and trust," he says in response to certain behavior by teachers and psychotherapists who do not are aware of the importance of building trust in this process. The trainer's ability (built in the overall process of his / her training) to create authority and trust in such an atmosphere, to provide peace of mind, is among the most important for providing a quality learning process.

We can conclude with Dr. Lozanov's Summary "Until the critical, though not always obviously conspicuous, objections are overcome until the natural negativism is overcome and until the harmony with the basic ethical values and focus of the personality nucleus is achieved, the suggestion does not can rely on a positive result" (Lozanov, 1971).

Summary

The suggestive process is usually a combination of suggestion and desuggestion. The process of suggestion should be treated very carefully. Dr. Lozanov describes cases when inexperienced psychiatrists or pedagogues who, without taking into account the individual personality, their emotions and their way of thinking, resort to direct suggestion.

When this direct suggestion "emerges into a consciousness as a result, it is confronted with the basic structure and the requirements of the personality that have been built throughout its existence." Thus, unnatural, not well-motivated and strange suggestions quickly fade and lose their force.

On the contrary, when the suggestion is well motivated, it is also much more durable and the students' impetus becomes much higher. "At the same time, motivation spares and even mobilizes the personality's ambition." (G. Lozanov, 1971)

An interesting phenomenon is also the fact that although the participants are informed that suggesting suggestive training is the suggestion, this does not make Suggestopedia less effective. Many of the research carried out at the Institute of Suggestology clearly demonstrate that the information about the suggestion made does not stop it.

"It is not wrong to say that all methods of suggestive influence are in fact methods of overcoming the anti-suggestive barriers." (G. Lozanov, 1971).



PRINCIPLES OF SUGGESTOPHEDIA

Principles of Desuggestive and Suggestive Pedagogy:

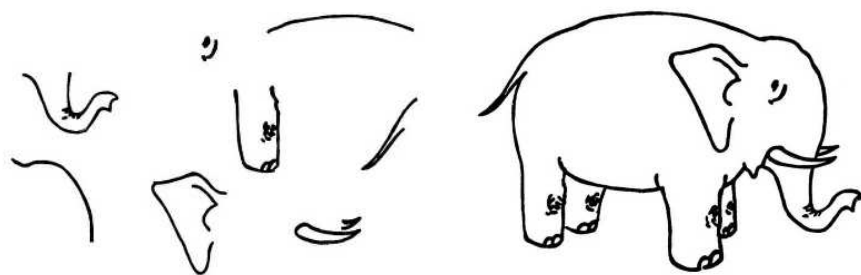
1. Joyful and spontaneous concentrational tranquility.
2. Dynamic, structured and hierarchical globality - the whole in the part and the part in the whole; the whole as a part and the part as a whole.
3. Desuggestive attitude to release spontaneously the potential of the mind.

Creating an attitude for increased opportunities for learning the three principles of desuggestive pedagogy can not be considered separately and separated from one another. Each one is a side of the other two.

If we consider each of the principles separately, which we should never do in practice, we can briefly clarify them for the purpose of our analysis:

The first principle guarantees the necessary cheerful, genuine and highly stimulating concentrative relaxation through the system of games and the system of humor, and, through visual materials, which are not illustrative, but rather *stimulating* in character, as well as through the overall training communication.

The second principle refers mainly to systematization of the study material in the textbooks and the visuals, but also to the behavior and the system of the trainer's work. It should be very clear that the method of training determines the way the personality develops. That is why it is our belief that the traditional methods commonly used in teaching (focusing on separate elements which are then integrated into units, or the so-called partial methods) has its place mainly in academic studies, in scientific analysis, but for the purposes of mass education of children and adults it is quite outdated. Modern life has made a huge leap forward in the spheres of the ideal and the material. It is necessary to absorb a huge body of knowledge. It is necessary to master global concepts and construct new ones. It is necessary to build increasingly broader views in all spheres.



Try to see the parts within the whole and the whole in the parts. This is the second principle of desuggestive training.



Fixing attention on the element, in isolation from the whole, attention most often remains fixed at the level of the part and then finds it difficult to grasp the larger picture. This is not to say that it makes it impossible, but it does make it harder. In addition, sometimes the whole cannot be well comprehended. A typical example is to teach children how to read by starting with the letters. It takes a long time for them to learn how to merge the letters and arrive at a word that at last has a meaning to it. Because of this approach, some people find it hard to comprehend global ideas. If learning foreign languages under this approach, the memorization of separate words and rules of grammar does not automatically imply that the student will be able to speak and comprehend what was heard or read. The process of easy comprehension and meaningful speaking is slow and cumbersome. In addition, it creates a psycho-traumatic environment. Many people spend their whole life studying a foreign language, yet they can never speak it.

All right, some will say, let us then study in the holistic way. We might just as well use the earlier two examples: teaching young children to read and teaching foreign languages to adults. Holistic training in reading for small children involves the method of whole words or whole sentences. Yet, many abandoned this method. Why? Because children cram the first 10 or 20 words and, because they do not know the letters, they cannot read new words, or can only read them with lots of errors. In addition, at this point the holistic method reverts to the traditional method of letters or syllables.

We have a similar situation in foreign language teaching for adults. Here the holistic approach is exhibited in reading books or having free conversation without the systematic study of grammar, phonetics, vocabulary etc. The learners do speak, but make many mistakes. Again, it becomes necessary to study each of the individual elements. Yet now this is done in the existence of fixed mistakes. If the teacher is not sufficiently flexible in his/her approach, this process can be substantially slowed down.

What is the reason for the difficulties with the holistic approach? The reason is that it has no structure. Training is delivered in large parts, yet structure is left to spontaneity or to additional study.

With traditional holistic approaches, difficulties stem not only from the lack of structure but also from the very nature of their holism or globality. With them, the whole is set once and for all. It is formed based on the system of the discipline studied. It has nothing to do with the specifics of the personality in its rich variety of states, often reaching multiple personality.

According to the second principle of desuggestive pedagogy, the study content of textbooks, visual aids and training method must be structured while preserving the hierarchy in the structure, but the part, the element, must be discernable within the whole. At the same time, the element must show the global



idea of which it is a part. In addition, there must be an acceptance of the possibility for the global idea to become part of another, larger globality, and for the part to become a globality, if interest and attention focus on it. I would not like to dwell on the example of the atom and the cosmos, where the atom can be a cosmos in its own right.

Rather professor Lozanov would like to stress that globality could change in a flexible way depending on which variant of the personality, with its new interests and emotions, is predominant at the time. It is well known for instance, that our emotions can turn a molehill into a mountain. Love, for example, can suddenly make a person who to us used to be just another element of the community, into a whole universe giving meaning to our life. Pablo Neruda in his odes to various objects and vegetables provides an illustration of this dynamic change of view and experience, which is reflected in our subjective global attitude to a given phenomenon. Thus, for example, his Ode to a Tomato turns a vegetable, one of many, into the center of our experience. One has the feeling that this tomato, suddenly in the focus of our consciousness and attention, has become the most important thing in the world. It seems that the whole world is now structured under the dominant hierarchical position of the tomato.

Of course, these deliberations do not change the basic principles of globalization of the content of the study material. This is just to indicate that the personality also adds something from itself to the process. In addition, this something must be made the best use of.

The third principle of desuggestive pedagogy suggests that once we have the necessary state of mind according to the first principle, once we have the necessary dynamic structuring of the study material in accordance with the second principle, we need to create a psychological set-up conducive to freeing the reserves of the brain and mind. What is particularly important is that this set-up needs to be spontaneously created by the teacher himself. The teacher's mastery is in facilitating the teaching-learning communication process at the levels of the reserves of the students' personalities. Naturally, certain suggestive influences are unavoidable in any communicative process, as indicated earlier. With desuggestive pedagogy, the trainer does not apply even the faintest pressure or insistence. He simply communicates at the edge of the unused reserves of the brain and mind. Thus, the students have the feeling that they achieve everything on their own; the help of the teacher is just the extended hand of a friend. Such communication is a matter of training and experience on the part of the trainer. (Lozanov, 2005).



EQUIPMENT AND METHODOLOGY OF SUGGESTOPEDIA

Three types of means are used in the suggestopedical methodology: psychological, didactic and artistic.

A) Psychological means

- Teaching and learning are organized as **processes of naturally occurring communication**
- The teacher carefully guides the learning process by creating group rapprochement, strong relationships and relationships. Gradually learners begin to create their own new reality. The teacher creates a highly stimulating atmosphere.
- The teacher is trained to use **non-specific communication tools** in the learning process (first and second level of communication, appropriate use of intonation and rhythm, creation of infantilization conditions, child plasticity, concurrent concentration conditions and relaxation).
- The teacher uses perceptual perceptions in the process of language learning (signals obtained through various intonations, face expressions, non-verbal signs for verbal information reinforcement, interior classroom components, including posters on the wall, etc.). They confirm and do not contradict the teacher's oral messages. They provide feedback on the teacher's trust as a source of information.
- The teacher creates a desuggestive tool to free the learner from norms and fears and creates conditions for increasing the amount of language knowledge and learning by opening up complex reserves of his mind.

B) Didactic means

- The Global-Private Approach is observed at the level of artistically created textbooks that contain aggregated (global) lessons (chapters) and they are composed of information that is at least 2-3 times more than traditional materials. Global texts emphasize through special techniques important elements of the language system.
- The Global-Private Approach is observed at the level of learning processes, beginning with the presentation of extensive linguistic and cultural information, analyzing the elements and returning to the global text for creative production.
- The Global-Private Approach is applied in learning by creating opportunities for spontaneous absorption of fragments of text within the whole by absorbing elements through separate smaller parts of the language used and later focusing on them and analyzing them.
- The Global Approach is observed at the level of the curriculum, which contains



integrated skills and knowledge for active learning but also for passive learning. The curriculum also includes information about artistic tools integrated in each stage of the learning process of the first (sentence, situation, general sense) and second level of grammar (grammar and lexical subjects, pronunciation, spelling).

C) Art tools

- Art is not a stage of performance or entertainment in the suggestopedia. The art is integrated in all stages of the teaching and learning process - presentation, controlled practice and creative practice.
- Different types of art artificially integrate the language classroom. For the purposes of the Methodological Framework, we can mention the most important.
- Classical music is used for the stage of presentation during the first and second readings of the concert session when the global (general) lesson with special intonation for the learners is read.
- Classical and Baroque music is widely used as the backdrop for many activities.
- Music is used as a signal for the beginning and end of a given activity, the beginning and the end of the lesson.
- The art is applied in the form of didactic and popular songs, which are chosen with special grammatical, lexical or cultural purposes.
- Art is presented in terms of drawings and paintings, photographs that are an integral part of the learning materials.
- Trainers also actively use artistically designed wall graphics with linguistic information to first activate peripheral and later learners' central perceptions.
- Finally yet importantly, it is the acceptance/ maintenance of a new role and the introduction of drama into the classroom, penetrating all phases of the learning process.

The art impregnated the entire teaching process in Suggestopedia. Art itself is considered the strongest form of suggestion. Among our many features, we can set out a few:

- Classical art spontaneously causes states of concentration and relaxation, which facilitates the acquisition of language knowledge and reduces stress and fatigue.
- Art has a strong motivational power, creating a highly stimulating (psychic and affective) atmosphere in the language classroom with its rich image and harmony.
- It provides many positive emotions and peripheral perceptions.
- Art, especially music, has a stimulus-freeing feature that encourages learners to speak in a foreign language without inhibition.
- Art encourages imagination and creativity in the classroom.



NON-SPECIFIC FACTORS OF COMMUNICATION

As we have already said, one of the foundations on which Suggestopedia is built is that consciousness and para-consciousness act inseparably. Under para-consciousness can be understood unconscious **(non-specific) mental reactivity**. Here in key everything is out of mind for a certain time - peripheral perceptions, emotional stimuli, unconscious automated activities, intuition, inspiration, and so on. As mentioned in the second chapter of this paper, 95% of psychological processes occur in the unconscious and only 5% in the consciousness. That is why Prof. Lozanov paid special attention to his research on the **non-specific (unconscious) communicative factors, which influence non-specific psychic reactivity**.

Group I: Factors of suggestion of equal communication

• Duplication

There exist first and second plan of communication when two parties communicate. Biplane, even multi-plane, is related to the behavior of the suggester-pedagogue when submitting information. The mastery of multilanguage is of great importance to the suggester-pedagogue if he wants to achieve suggestopedical results that are many times greater than those that fix and support the public norm. **Bipolar behavior is related to professional prestige and ethical personality.**

"In any case, no suggestive work should be done without the duality of behavior being overcome. Any rushing into a suggestive work, if two-plan is not controlled, is doomed to failure" (G. Lozanov, 1971).

• Intonation

In the suggestion and suggestion, intonation is considered only in its sound and tone characteristics. A number of experiments were made (G. Lozanov, 1971), which lead to the following most important conclusions:

(a) Intonational presentation of the material plays a positive role when an expression of authority is expressed;

(b) Authority has a positive effect on permanent memory, when it finds an acceptable external form that satisfies the learner's expectation.



- **Rhythm**

Rhythm is a basic biological principle. It is a reflection of the rhythms in nature. There is a 24-hour rhythm, annual rhythm, seasonal rhythm and more. There are also cosmic rhythms that affect the personality in one way or another. The rhythms influence the vegetative reactions, and hence the psychological life of a person. To develop Suggestopedical rhythm theory further, we have developed the theme of the rhythm that you can find in Chapter "The Importance of Rhythm".

Group II: Factors of suggestion of unequal communication

- **Authority /prestige/**

The Institute of Suggestology has accumulated tremendous experimental and theoretical material about the role of authority in the realization of the suggestion. The power of authority is a powerful suggestive tool. With this in mind, when organizing the suggestopedical learning process, Prof. E. Gateva and Prof. G. Lozanov associate Suggestopedia with the prestige of classical art, which has been evaluated impartially by the time. In addition, it has not in vain inspired humanity for centuries; it has been at the heart of every subsequent civilization. It overcomes the anti-suggestive barriers through the effects it exerts on non-specific psychic reactivity. It creates a state of concentrated psychorelaxation and harmonizes psychophysiological processes. Of course, in organizing Suggestopedic educational process, classical art is delivered in a specific way, consistent with the general theory of suggestion.

The prestige of the teacher is particularly important. It has been shown that authority is one of the strongest placebo factors in Suggestopedia. Through the authority of the source of information, the anti-suggestive barriers of the person being trained are overcome lightly and imperceptibly, and the learner is quicker, lighter, more massive, and more durable. (Suggestology, 1971).

- **Infantilization**

Infantilization in the suggestopedical learning process should not be confused with infantilization in the clinical sense of the word, nor with infantilism in general psychology. Infantilization in Suggestopedical learning is directly related to authority. The higher the authority, the more infantilization develops. Infantilization is trust and receptivity on the part of the trainee. Infantilization should be understood to be almost the same as the purely trustworthy condition of the child he reads, or only reads tales.



- **Pseudo-passiveness /concentrated psychorelaxation/ - the most important moment in Suggestopedia.**

This is the status of the trainee, which the suggestion pursues through the overall organization of the learning process. It is characterized by a logical and emotional concentration in the absence of psychophysiological stress, of a stressful state and is carried out against the background of the harmonization of different layers of consciousness and sub-consciousness. All means of suggestion act in inseparable unity and are mutually determined by contributing to the state of pseudo-passiveness/ concentrated psychorelaxation. All of them, however, are basically realized through non-specific psychic reactivity.

The artistic organization of the suggestopedical learning process creates conditions for pseudo-passiveness /concentrated psychorelaxation/ of the trainee as well as for his aesthetic upbringing. In these conditions are revealed most fully reserve, and personality and is facilitating overcoming of the anti-suggestive barriers with created position of trust and authority and infantilization between the teacher and the learner.

In Suggestopedic Learning, learners and trainees should always be "on the brink" between art and didactics, willingly and willingly to "enter" into Suggestopedic art and "go out" from it.

The content of the course is globalized in a number of themes, which include the most important for the practice didactical material presented through the artistic organization of the learning process. Literature, theater, music, opera, choreography, painting, graphics, sculpture, architecture, photography, cinema and television, decorative and applied art are integrated into an appropriate form through which content is introduced.

In Suggestopedia, catharsis of art affects both learners and teachers. The unconscious mechanisms of the psyche "propel" a lot of "suppressed" parts of the personality that are involved in the process of desuggestive training. Suggestopedia did not go to psychoanalysis or psychodrama, just the motivation and the interests in the studied matter "take" the attention from the diseased place. Catharsis takes place unconsciously and no trace remains.



SUGGESTOPEDIA'S LAWS

*„The mind can not acquire an immense amount of information
without LOVE, nor to think creatively without LIBERTY.*

This is the trap of nature.”

Prof. Dr. Georgi Lozanov

With the development of Suggestopedia, Prof. Lozanov defines seven laws, without which, Suggestopedia would not be Suggestopedia. They provide a broad foundation for an effective learning process.

According to Professor Lozanov (Lozanov, 2009) all the laws of Suggestopedia act only if there is LOVE, FREEDOM, and the teacher has a high personal and professional PRESTIGE.

I law: LOVE

LOVE in Suggestopedia and any learning communication can be interpreted as:

- Sincere love, respect and care for students.
- Love of the profession and its deep social and humanistic mission.
- Love of knowledge, nature, art, and life in general.
- Love each other and they respect between people.
- Love and, at the same time, striving to develop the learner's independence.

The teacher can not gain access and can not open the backup potential of the learners if he does not really love them and does not believe in their hidden abilities. This message is transmitted not only through the words and the willingness of teachers to teach knowledge, but much more by actions, gestures, eyes, voice and intonation, through which teachers can show their love, and to build lasting feelings of trust. Teachers keep teaching, but their guidance is unobtrusive, caring correction they tactful and useful. In order for pupils to feel relaxed and secure in the classroom, the teacher-student relationship should be based on the parent-child relationship.



II law: Freedom

The FREEDOM in the suggestopedical communication may be interpreted as:

- Relief from fears and anxiety related to learning.
- Exemption from the socially-accepted norm that tells learners how much they can learn and remember for a certain period of time.
- Freedom, which empowers teachers to adapt learning, chooses the right technique that is appropriate for every individual and group.
- Freedom based on the real needs and interests of the trainees, which ultimately leads them to self-confidence, self-control and self-control.
- The freedom of learners to choose in the learning process among many stimuli, perceptions, proposals, information units, activities according to their own beliefs, values and norms.
- Freedom of communication, building relationships in the process of teaching and learning.

Freedom is not a state in which the teacher dictates what needs to be done and what reserves must be open. It is a spontaneous feeling when one is better aware of his own strengths, interests and abilities; he feels the doors of personal self-realization open.

At the same time, freedom does not mean that full freedom is given to learners, what, when, and how to learn.

Freedom goes hand in hand with a structured process of training on the Suggestopedical method.

It also promotes the guided and purposeful individual work of learners.

III Law: THE TEACHER'S BELIEF THAT SOMETHING UNUSUAL HAPPENS

This represents the quintessence (the main and most essential element) and the ultimate goal of the suggestion. It refers to the process of gradual **opening of the hidden reserves of each learner**. It has been formulated in various ways by Prof. Lozanov over the years, and in his latest version he sounds like „the teacher's belief that something unusual happens”.



In fact, there is much more to this wording of this Suggestopedia law.

First, it requires the existence of:

- Teachers' expectations of their ability to activate learners' reserve capacity.
- Teachers' expectations about learners' ability to study at the level of reserves.
- Expectations for teachers to unleash their own untapped potential (creative ideas, new talents).
- Inspiration because of spontaneous achievements exceeding the socio-suggestive norm.

Secondly, the process of revealing the potential abilities of each individual can be seen because of applying the **global and artistic approach, by activating the rational and emotional, left and right hemispheres of the conscious and subconscious minds of the learners at Suggestopedia courses**.

Thirdly, it is about opening up not only language or communicative reserves but a whole system of reserves in teaching and learning.

The reserve system is shown in:

- Increasing the capacity and efficiency of memory, the ability of learners to remember and use a large number of lexical units and grammatical structures.
- Increased memory capacity and the ability to memorize large amounts of content (cultural, historical, geographical, social, etc.).
- Increased activity of mental and creative processes in the process of acquiring and using language.
- Improved emotional tone, group interactions, a positive atmosphere in the classroom.
- Increased speech performance, enhanced communication and socialization capabilities.
- Enriched world viewpoints, cultural insights, expanding interests.
- Lack of fatigue, tension, and improved working capacity.
- Improved health parameters.



In conclusion, it should be noted that the system of brain reserves always functions in the unity of pedagogical, psychological, social and psycho-hygienic aspects, as shown above.

IV Law: MULTIPLY INCREASED MATERIAL

This law provides for an increased amount of teaching material **at least two to three times compared to traditional methods**.

The teaching material in the accompanying language books is structured in **global units**. Lexical, grammatical and meaningful information was expanded and grouped by themes and situations intertwined in **the plot line of the book**. The information is learned by the trainee at different levels of **active and passive attention**, at different levels of consciousness/subconsciousness. This is a quick and effective way to acquire and process large quantities of systematized information to form skills based on real life situations.

The rationale for presenting a large amount of survey information for each next global lesson should be found in several interrelated directions. We have already mentioned the need to structure the material in a way that allows its active and passive absorption. The big amount of information exceeds the limits of active attention that they are capable of quite limited, and much of the information goes to the subconscious. Also, through the high information burden, we challenge the mental capacity and potential of learners, their ability to create relationships, create more associations, improve their memory abilities.

Finally yet importantly, the majority of information units give more freedom to individual learners to choose, choose what they need in accordance with their interests, abilities and attitudes.

The introduction of large amounts of learning material is possible thanks to the evolving story (plot), anchored at each proposed textbook that looks like a piece of literature or work. It contains real life characters who act in very real situations.

For example, the first chapter of the English textbook „Return“ contains about 800 lexical items, multiple collocations (collocations) and phrases, grammatical and functional structures intertwined in the plot. The role of all these things makes storing easier and more enjoyable. The presentation and arrangement of the lexical, grammatical and functional material is structured in a specific way that will be considered in the development of suggestive materials. The excerpt from the textbook will give you an idea of the vast amount of language material interwoven into communication acts.

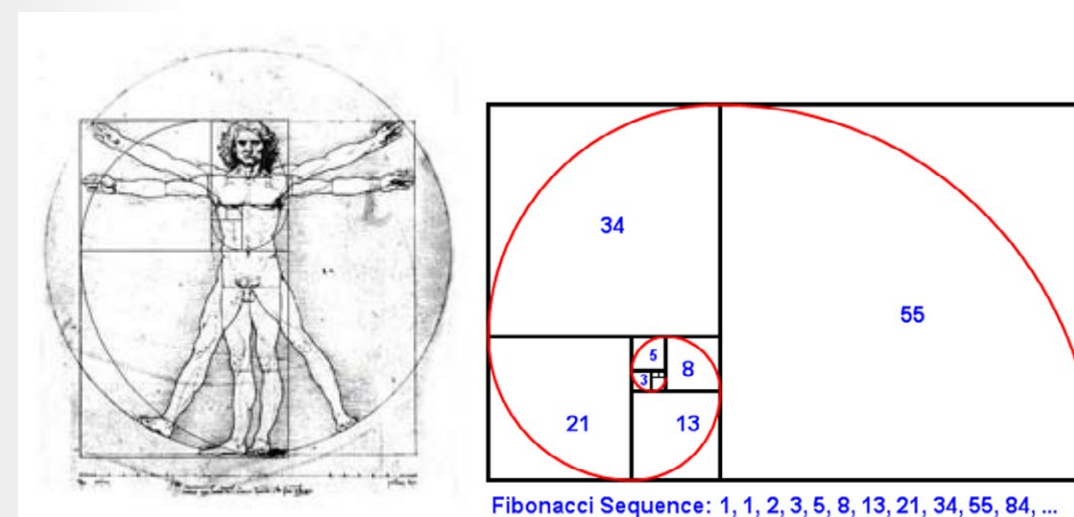


V law: GLOBAL-PARTIAL; PARTIAL-GLOBAL

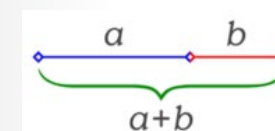
According to Professor Lozanov, the law states the direction of teaching and the learning process and is called the Global-Part; Part-Global - from the global to the part. A global approach to classroom development and classroom presentation has a leading role. Teachers and designers of materials first give a full picture of the phenomenon studied and its most important features. The trainee experiences, builds and preserves the global image in his mind first. For example, in situations of teaching English, will introduce the present simple or perfect in the most typical context and use, and only later will focus on a variety of forms and elements, will explain them, we will repeat and will unite. When we present a global theme, such as the country's culture, we will present a global lesson with the most typical events - the works of art. Only later will we focus on different periods and elements, thus enriching the information. What happens later is the use of the private approach, the focus on the details of the global topic, after the trainer has already heard and understood the global picture and the links between its elements. The teacher draws the learner's attention to the private, encourages him to discover his traits, his connection to the global (the general). The next stage involves the intensive practice of elements on the re-productive and production level, but what makes Suggestopedia different at this level is that the private (the element) is practically never completely separated from the whole. Practice always takes place in the context of the history of the textbook and the role-play the learner has adopted. Finally, we summarize the most important features of the global lesson, which represents the final stage of the transition globally-partially-globally, by presenting in the learning room (and in some cases testing the level of acquired knowledge and skills). This time though the „whole“ is understood on a deeper level, it is enriched with new elements and the most important thing is that knowledge is applied creatively in many practical activities.

VI Law: THE GOLDEN PROPORTION

Closely related to art is the next specific law, which provides for the **“golden proportion” to be applied** at all stages of teaching and learning in Suggestopedia. The golden proportion is present in the beauty of nature, in the proportions of the human body. It is located in world-famous masterpieces of architecture, painting and music. It is a symbol of beauty, harmony and perfection, and can be found in many places in nature and life. Leonardo da Vinci devotes much of his work to research on golden proportions. It is also known as the **“golden section”, “golden cross” or The “divine proportion”**.



The Golden Proportion is an irrational number in mathematics, which expresses the ratio of two parts to which the ratio applies: the smaller part is related to the larger part, as much as to the whole. It is expressed by the Greek letter ϕ and has a value of approximately 0,618. It can also be expressed with the reciprocal value of 1.6180.



$$b/a = a/a+b = 1/\phi = 0,618034...$$

$$a/b = a+b/a = \phi = 1,6180339...$$



Italian mathematician Leonardo Fibonacci published in 1202 a number of numbers, each of which is obtained as a sum of the previous two:

1,1,2,3,5,8,13,21,34, 55

An astonishing coincidence is observed in the fact that the Fibonacci numerical order, the ratio of each number and the next one in the line of branches to the golden section:

2/3 0,66....

3/5 0,6

21/34 0,61...

The larger the numbers, the closer their ratio to the golden section.

In any two variables that are in the ratio **0.6180 34 ... (1.618033 ...)** or in certain degrees of this ratio, they are in the **"best ratio"**.

For example, if you want to calculate what proportion to Budd is your waking state to state your sleep in one day to get you in the golden proportion (in harmony), then you must divide X hours (in greater section tons. (ie, the state of awakening) / 24 hours (total day) and it is equal to 0,61803. This way we get approximately 15 hours. In this case, the sleep state should be 9 hours to be in harmony. And indeed, the weekends we sleep at lunch are our most harmonious days.

sleep wakefulness

sleep / wakefulness = **24 hours = 0.6180**

therefore, the alertness = $24 \times 0.6180 = 14.83$ or approximately 15 hours

This universal law requires that pedagogy also seek to establish balance and harmony at the level of methodology, teaching materials and the organization of the learning process. The golden proportion can be applied in many places in the suggestopedical learning process.



In particular, the Suggestopedic method seeks to search for:

• **Balance between the lengths of the active and passive concert session**

- First concert session - active / passive = 50:30 minutes;
- The other concert sessions - active / passive = 40:25 minutes;
- Changes in tempo, rhythm and dynamics (fast, slow, moderate, high, low, medium);
- The duration of the two development stages;
- Changing the active phases of work.

• **Emotional-logical balance**

This does not mean alternating the emotional and logical stages of learning, while integrating both the logical and emotional aspects of the human personality. Do not forget that pleasant emotions stimulate higher intellectual activity.

• **Balance of conscious and unconscious in the organization of the lesson**

This means that the teacher has to develop a sense of conscious and paranoid ingredients in the learning process. No emphasis should be placed on material awareness, not just intuitive perception.

• **Inter-subject globalization**

This means that global themes should not only cover the vocabulary and grammar of the foreign language being studied but also contain learning content from other subject areas of the country such as history, geography, art, etc. to integrate learning content into the learning of a foreign language.

This includes:

- Integration of holistic and partial approaches.
- Proportions in the structure of learning materials.
- The feeling of golden proportions in the learning environment.
- The use of a font that is close to the golden section /present work is written in the LATO font, which we investigated as closest to the golden section/.



VII Law: CLASSICAL ART

The following specific law Suggestopedia refers **to the use of classic it art** in all its forms at all stages of the process of teaching. Prof. Dr. Evelina Gateva who brings art and aesthetics in Suggestopedia, experiment with more than 100 musical works and over 150 selected works of fine this art, which integrates into the process of learning and teaching materials. It creates the following **suggestive forms of art**:

- Melodrama and musical recital to present new material;
- Suggestopedical operas for children;
- Artistic Didactic Songs;
- Artistically created Suggestopedical textbooks/ dramatic books;
- Forms of visual art.

Classical art is widely applied in Suggestopedia:

- Aboutto present and validate the curriculum;
- To create conditions for psycho-relaxation;
- To increase the scope of positive suggestions;
- For enrichment with emotional stimuli;
- To harmonize scientific knowledge with art, language, and music;
- To introduce aesthetics throughout the learning environment.

In accordance with the seven laws described above, Suggestopedia/ Reservoir can only be implemented if:

- The volume of the material is enormous.
- It is structured in whole-part, part-whole, whole in part, part in the whole.
- The teacher has a high authority and persuasion (credibility).
- The teacher has real expectations in terms of achieving very high results.
- The teacher loves all students and respects their feeling of freedom.
- The teacher uses art in the learning process.
- The dynamics of the learning process always respects the law of harmony of the Golden Proportion (G. Lozanov, 2009)



SUGGESTOPEDICAL COURSE OF THE TEACHING SUBJECT – HOW IT'S MADE?

The specific principles and methodology of Suggestopedia determine the specific nature of the teaching and learning process in the language learning room.

Each **Suggestopedic course** is made up of three important parts:

A. Preparation

B. Training

The training is comprised of “n” number of suggestive cycles. Each **Suggestopedic Cycle** consists of the following parts:

1. Introduction

2. Concert session

3. Development

4. Presentation

C. Analysis

Preparation

The beginning of each Suggestopedic preparatory course is preceded by a diligent preparation made by the lecturer and support staff. First, the teacher conducts interviews with all students to get information about their language level, needs and expectations, personality, learning preferences, and so on.

Then, the aesthetic decoration of the schoolroom requires a number of well-positioned grammatical and lexical boards presented on the scene of nature (landscape, flowers, etc.). They include photos, reproductions of classical paintings, plaques with cultural information, teaching materials, translations, and a set of artistic items, accessories, and forms of reporting.



Training

1. Introduction

In a Suggestopedic language course, the first introduction the teacher makes is a key part of the whole training. It represents the first meeting of the teacher and the trainees and aims not only to introduce a lot of new teaching material, but also to predispose the learners, to engage them in the adventure that expects them, to set them up positively and eventually to overcome some of the barriers they could raise.

The Global Lesson in Foreign Language Learning by Suggestopedia is usually a chapter of the textbook. It is, as already mentioned, like a literary work, most often a play. Each next introduction is the first meeting with the new material to be studied in the coming days.

The first introduction at the beginning of each course is longer, due to the acceptance of new roles by the learners and immersion in the script. This is a unique and memorable moment in Suggestopedia when the teacher and all students choose a new name, nationality, profession and so on. And enter into an ongoing role-playing game that lasts until the end of the course.

From the very beginning, they are all engaged in communication to get to know and feel relaxed about the new language. From the very beginning, they sing, dance and play games, all in well-structured foreign language focused activities. The introduction phase also aims to develop the new linguistic and content material in the global lesson of active learning through brief explanations, the use of murals and didactic songs. It also gives some guidance on the historical line in the textbook head and increases student expectations.

Typically, budgies last about 20 minutes, except for the first day of the course, which is longer than 50 minutes.

2. Concert sessions

2.1. Active concert session

In a state of increased motivation and expectations, learners become acquainted with the new material against the backdrop of music.

This is the famous first session or the first concert session in which the teacher stands upright and the literary text read slowly and solemnly in harmony with the chosen music of classical and pre-classical composers (Mozart, Beethoven, and Haydn).

The special selection of concerts is based on research (Gaute, 1982, 1991). Students are instructed to follow the text along with the rhythmic reading of the teacher. Teachers using Suggestopedia Method are subject to special psychological, musical and vocal training to harmonize the language program with the pace, dynamics, rhythm and tone of music. The most important thing, however, is the teacher's ability to listen and fit into the performance of the orchestra as one of its tools. Part of it should be the ability to express himself or herself clearly being given a different form every sound, word and phrase to make significant breaks and segmentation (separation) of the text.



2.2. Passive concert session

The teacher carries the second reading of the same teaching material during the second concert session of baroque music (Handel, Vivaldi, and Bach). This time the books are closed and the learners enjoy completely a soothing, rhythmic stream of sounds. The teacher sits comfortably and maintains a visual connection with the students. Unlike the first concert session, the intonation and tempo of teachers sound completely natural to express real life and the characters of the textbook. The articulation (gestures) remains clear and comprehensible. The learners are familiar with the content of the story, but they still hear the same words and expressions through different intonation and rhythm patterns that make memorizing and remembering. At the end of the second concert reading, the effect of relaxation is complete.

3. Developments

3.1. Primary development

The first development of the new global lesson (the **reproductive phase**) takes place over the next two or three days. It goes through several phases and always deals with separate parts of the text (the text is divided into meaningful units). It aims to revive and refresh the global lesson presented at the concert session. It develops students' reading skills, their understanding of the text, their pronunciation, their memorization of completely lexical-grammatical parts. Most importantly, in a positive, emotional atmosphere, the teacher creates a sense of confidence in which the large volume of material could easily be mastered.

a) Phase of reading and pronunciation

The teacher can start playing/ uttering several separate parts of the foreign language (the corresponding part of the text) using different intonation patterns resembling classical music or natural intonation in the situation. Students repeat after the teacher and try to recall the meaning. In general, at all initial stages they are encouraged to refer to the translation in their native language. Students repeat in chorus (whole classes, smaller groups) and individually. Humorous intonations are also often applied - humor and the laugh are seen to be an essential part of the learning process.

Students and teachers read every part of the global lesson in succession. Trainees glance at the translation of the text. **The first reading is** slow and reminiscent of the first concert session. Different reading techniques are used. The first reading is only choral, and individual students read gradual sentences and situations. Attention is paid to **different intonation** (for example, loud,



quiet, slow, fast, sad, joyful, mocking, flattering, etc.). **Attention may be paid to the various activities**, (for example, when a bold word appears or a high-lighted word - hit your hands, walk with your feet, stand up, touch the ear, turn your head, etc.) The redirect of attention is in accordance with the dual-plan technique of the suggestive communication memory that is activated, and detention is better when learning happens at „second level.“ The first plan deals with a task similar to a game or case study. The games must not be complicated. It is to be used for entertainment - they are an essential part of learning. Playing games recreates the atmosphere of a happy childhood („infantilization„ means-suggestive communication) but take into account the psychological characteristics and needs of the adult learner.

The teacher also applies a variety of different reading tasks such as: racing to find words and phrases, reading back and forth, reading in a single chain, and so on. At certain times, the teacher gives a brief explanation of the reading rule, provides more examples, and directs students to the grammatical section of the Suggestopedic textbook.

b) Phase of translation

The teacher invites the trainees **(provoke) a second reading of each part. The translation is removed** (This is just a reminder that Suggestopedia was created for multilingual classes). The second reading is faster and the students present themselves individually by reading in roles. They try to imitate characters in history by placing different clothes, accessories (hats, sunglasses, scarves, wigs), etc. While doing so, individual students can volunteer to translate sentences and paragraphs. The translation of paragraphs can also be done as a group work. Clubs of specialists can be created reading and translation. The most important thing is respecting the principle of play / activity and moving the attention from the first (game) to the second level (language) and vice versa. In addition, while working on the details, learners' attention is always directed to the general - the plot, the script, and the roles they perform.

c) Working on linguistic or content areas

During the second reading of the text at appropriate places, students' attention is attracted to the grammatical paradigms (models) on the right side. They can be read rhythmically, graduations can be linked to different gestures. Grammar paradigms (models) are applied through songs and simple dances. The grammatical elements are encoded with gestures, motions, symbols, objects. At the same time, the grammatical phenomena in Suggestopedy are always derived from and treated in the context of the stories/ situations in the book. For the use of grammatical structures, the teacher again applies different games: imitation games(guess the tension), telling a short story through a chart, timeline, ball games (for questions and answers), card games, dice games, ordering sentences and paragraphs, etc.



The activation (unlocking) of grammar and vocabulary takes place in a strictly planned way and is always based on key moments from the development of the story in the Suggestopedical Book.

Suggestopedia uses a large number of vocabulary games such as trade (buying and selling of items), cognitive (association) Games (knowledge of letters, words, phrases, nationalities, professions, etc.), Work in groups and the formation of a number of categories (synonyms, coding and decoding sentences by numbers and other symbols, memory games, chain games, etc. What makes Suggestopedia different when using games is that these games are not a separate part of the learning process rather than a stage. Secondly, they deal with larger quantities of material and significantly improve memory. Thirdly, they are always closely related to the characters and the history of the book, which creates a natural motivation for participation.

In the linguistically oriented development, the teacher also encourages many substitution and transformation tasks by replacing words, changing the genus of verbs, making statements in question/ negative sentences. Thus phrases are made removable, detachable from the book, and students feel more independent in the transition to more creative stages of work. Similarly, the teacher deals with content areas - e.g. information about the country's culture.

3.2. Secondary development

The transition between primary and secondary development is very thin. The goal of secondary development is to create opportunities for personalized use of language in new situations. Role-playing games based on the book become more complicated, but create new obstacles that require new solution, new Translator's note key, which in turn requires creative recombination of language resources. Students can make their own version of the stories in the textbook, add more details, express their opinions, and oppose views.

4. Presentation

The most creative stage of the development process is the so-called performance that took place during the last two hours before the new concert session. Students prepare at home Spoken based and key themes from the previous global lesson. Some couples can prepare a dialogue. During the presentation, each participates in a monologue or dialogue that represents the synthesis of the material covered. Very useful are stories with some recordings are made at home and are unprepared at the same time because they are original, personal, and during the presentation phase, the teacher and other students ask questions that cause unplanned discussions. In addition, the teacher often introduces a small subject and asks the students to integrate it into their history, which creates opportunities for casual speaking.



GAMES AND TASKS

Who is the creator of Suggestopedia?

- What is Suggestology, Suggestopedia, and Desuggestopedia?
- What are the bases on which the Suggestopedic Methodology is built?
- What are the principles of Suggestopedia?
- What are Suggestopedia's resources?
- Visualize the laws of Suggestopedia.
- Draw a mental map of the Suggestopedic cycle of teaching.

PRESENTATION OF THE LEARNING OUTCOMES

At the end of your training in the methodology "NEWave in Learning" will be necessary to develop and present a mini suggestopedical cycle on a chosen topic. We wish you successful and inspired work during the training.

GOOD PRACTICES

Results of foreign language learning for adults,

measured in the Scientific Research Institute of Suggestology at the Ministry of Education and Science (1966-1992)

From "Suggestopedia - Desuggestive Training" (G. Lozanov, 2005)

As it has been said, Suggestopedic training, when properly organized, should reveal the Suggestopedical Reserve Complex. This means that not only the learning of the new material should be significantly more frequent, more durable, and better off at the creative level. It is also necessary to obtain always results of both educational and psychological.

Measured results from a medical point of view have become the basis for the development of a complete suggestopedical system as a psychotherapeutic direction. However, the learning outcomes, with its volume, durability, creative focus, and secondary motivating power attract the most attention of specialists. They were published in a number of reports or reported at conferences and symposia on Suggestology and Suggestopedia, Sofia (1971), Moscow (1974), Ottawa (1974), Washington (1975).

There may be different variants of Suggestopedic foreign language learning - from several hours a week to a full immersion in the foreign language suggestive atmosphere. It is not the number of hours, but the psychological organization of the learning process.

If we take the most common 25-day foreign language suggestion courses, 4 lessons a day, without homework or just 15 minutes in the morning and informative reading in the morning, we can list the following results:

1. An average of 90% of the vocabulary is enrolled per course covering 2000 lexical units.



2. More than 70% of the acquired new vocabulary is proficient at the active level and is used freely in colloquial speech, while the remaining vocabulary is commanded at the transfer level.
3. It is spoken within the whole basic grammar.
4. Any text is read.
5. Writing with errors is possible.
6. Some speech errors do not interfere with proper communication.
7. The pronunciation is satisfactory.
8. There is no fear of contact with foreigners speaking the same language.
9. There is a strong desire to continue learning in the same courses.

This applies to novice students who have never previously learned the language. Of course, with learners who have a preliminary understanding of the language, the results are much better. Approximately this pace is followed by the use of the new material in subsequent courses.

PRACTICAL APPLICATION

The objective of methods "NEWave in Learning" (built based on suggestopedical teaching methods) and training, making it accompanies, is to equip you with the knowledge and skills to develop your own language learning content, to teach it in a quick, an easy and joyful way that leads to much higher results.

Suggestopedia, as a system that is scientifically grounded and experimentally tested, occupies a particularly large part of the present work.

You will be able to apply it fully to your work by enriching it with the suggestions of pedagogical theories and psychological practices.



HUMAN AS A HOLISTIC BEING

"The more holistic approach we employ to develop ourselves—our spirit, soul, body and mind, the closer we come to the Universe and the more we realize our unlimited mystical potential endowed by the Universe."

Maria Tencheva

OBJECTIVES OF THE TOPICS

After you get familiar with the topic you will be able to:

- To define the meaning of holistic human development;
- To apply the holistic approach towards development and teaching of educational content;
- To link human to the entity of the Earth and the Universe in your educational practice.

VERIFICATION OF THE UNDERSTANDING

In a group or by yourself discuss and record the answers to the following questions and tasks:

- According to your opinion, what are the elements of a human being?
- What elements of the human being do you address in your courses?
- Have you attended a seminar or a course addressing the mind together with some other human elements? What are these elements?

CONTENT INTRODUCTION

What does "holistic human development" mean?

The meaning of "**holistic**" found in the dictionary is defined by two words - **whole** and **mystical**. These two words seem to differ a lot in their meaning at first sight. Still, if one plunges deep into their meaning, they will find it is not by chance that these two words come together.

On one hand, "**holistic human development**" means "**overall/whole development**", that is development of all human elements - **spirit, soul, body, mind**. On the other hand, an individual does not exist in isolation, but as part of something bigger, **an inseparable part of the Earth and the Universe**. In other words, if we examine the "**holistic (overall) human development**" in the context of **the Universe**, as long as the Human-Universe interrelation is still associated with mystical subjects and spiritual theories rather than scientific



ones, we can easily replace the word "**holistic**" by "**mystical**" human development.

"**Mystical human development**" is a concept that fits the methods of fast and efficient learning very well. The methods are aimed at **illustrating (and also at providing evidence by their implementation)** that using of the "**holistic learning approach**" results in **wholeness** of human development in all aspects, in recognition of hidden personal resources, and also in "**mystical**" learning achievements beyond the human potential known so far.

We will call this intellectual product "**NEWave in learning**" as long as it claims to look at the educational process in a new light - as an **overall process (of wholeness)**. A process that encompasses both human in their wholeness - **spirit, soul, body, mind, and human, the Earth, the Universe** as an entity.

The holistic human approach is employed in various domains - medicine, psychology, education, etc. and it has its advantages. The holistic approach should have become axiomatic for the development of educational programmes for all age groups, because it is the only way to bring out our unlimited potential and our hidden resources within. It is groundless to develop an individual only partially or out of the context of **Wholeness - both of the Earth and of the Universe**, or to develop their separate elements, instead of their **wholeness**, composed of **spirit, soul, body, mind**.

"Above all, we should not forget that **any student is an entity** - it is not only a part of the brain that is being trained, but all of the human is being involved in the process instead. Therefore, an educational theory would be in line with reality, if it was built on global-integrative grounds", prof. Lozanov wrote in his book „*Suggestopedia - desuggestive education*" (2005: 123).

"The spirit, the soul, the body are being continuously subjected to and responding to various influences in order to grow and vice versa - to suffer and degrade. **Nobody and nothing in the cosmos is in a state of absolute isolation, but in a process of interaction instead.**" (G. Lozanov, 2005).

The Spirit (the spiritual aspect of human, the Higher Self) - **this is our energy**, our link to the wholeness, our uplook to the Higher Mind, to the Creator, to God, to the mystical, or generally speaking to **the Universe**. We are part of the Universe. All in the Universe vibrates and we vibrate together with the Universe.

Further below you can read more about the tools that you can use to address the spirit in your educational practice.

The Soul (the psychological aspect of human) - **these are our emotions**, feelings, sensations, perceptions of the world around.

The human mind is composed of consciousness and paraconsciousness. Some researchers argue that only 5% of psychological processes take place in human consciousness and 95% of them occur in paraconsciousness (subconsciousness). Experienced emotions, feelings and events are kept in the subconscious mind. The long-term memory is also found there. In view of **good mental health** and due to the long-term memory, any educational process should go through **experience**. Any information obtained during the educational process will be kept in subconsciousness for a long period of time if it floats along with experiences and emotions.

Further below you can read more about the tools that you can use to address the soul in your educational practice.

The Body (the biological aspect of human) – **this is our physical body**, used by an individual to establish contact and interact with the surrounding world.

In any educational process we should take care of the proper functioning of the body, since the brain – the mind's tool, is part of the body. If the body does not function properly, **biochemical processes in the organism** will be disturbed and hence, the mind will hardly learn; concentration and focus will be absent; it will experience pressure and tiredness.

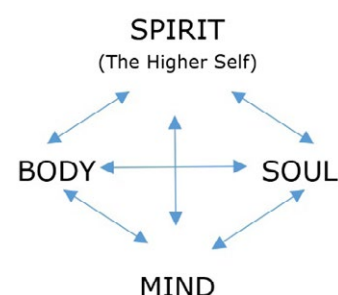
Further below you can read more about the tools that you can use to address the body in your educational practice.

The Mind (the mental and intellectual aspect of human) – **this is the manifestation of our thoughts**, knowledge, erudition, choices, decisions.

We can compare our mind to an iceberg, composed of our consciousness and subconsciousness – our **consciousness** is only the tip of the iceberg and our **subconsciousness** is always under the water and it is always a considerably larger part of it. In fact, subconsciousness is a much more powerful and important part of the mind, as long as all memories, knowledge and experiences amassed for years are kept there. **We develop our mind throughout life and it makes us the only cognitive beings onto the Earth.**

Further below you can read more about the tools that you can use to address the mind in your educational practice.

Let us take a closer look at the elements that constitute human being – **spirit, soul, body and mind.**



The Bible says that human body is composed of soil. In fact, our body is composed of the same elements found in the soil – oxygen, hydrogen, nitrogen, calcium, etc. This incredible combination, endowed with abilities to feel and think, is certainly a masterpiece of Creation.

The spirit is the breath of life given to us by Creation/Universe/God. When an inanimate body is endowed with the spirit it comes to life. And vice versa, when the spirit leaves the body and goes back to Creation/Universe/God, death occurs. The spirit is a source of life and vitality for all beings.

Let us use a comparison – think of humans as smart bulbs. We can compare the spirit to a flow of energy – electricity, and the body – to an electric bulb. When the inanimate **body (the bulb)** gets into contact with **the spirit (electricity)**, it comes into being and a living **soul (the light emitted by the bulb)** appears.



While growing up, individuals begins to use their **mind (high technologies – smart lighting)** too. The process of establishing neuronal connections (i.e. synapses) in the brain, accumulating knowledge, thinking, making decisions and bringing things to consciousness begins.

The abovementioned comparison illustrates how these four elements are inextricably bound up with each other and how they cannot operate and develop further without each other. We believe that similarly to technologies, which constantly develop and which boundaries of development we are not familiar with, **the human mind is unlimited in its development** too. The question is how to find a way to developing brain resources. We consider that the **suggestopedia teaching system**, which emerged in Bulgaria in the 70-ies of the 20th century, develops the human potential and **activates the hidden resources**. Consequently, we have decided to use it as our basic methods further developed and enriched by other educational methods and psychological tools.

The objective of the methods of fast and efficient learning is to bind physical, emotional, spiritual and cognitive human development into a united system of educational content teaching. While we were developing the “NEWave in learning” methods we aspired to provide a **set of holistic approach tools** to the teachers so as to enable them to work on **holistic personal development and also on obtaining integrated knowledge** in the process of developing and teaching educational content **in the context of Wholeness – both of the Earth and of the Universe.**

GAMES AND TASKS

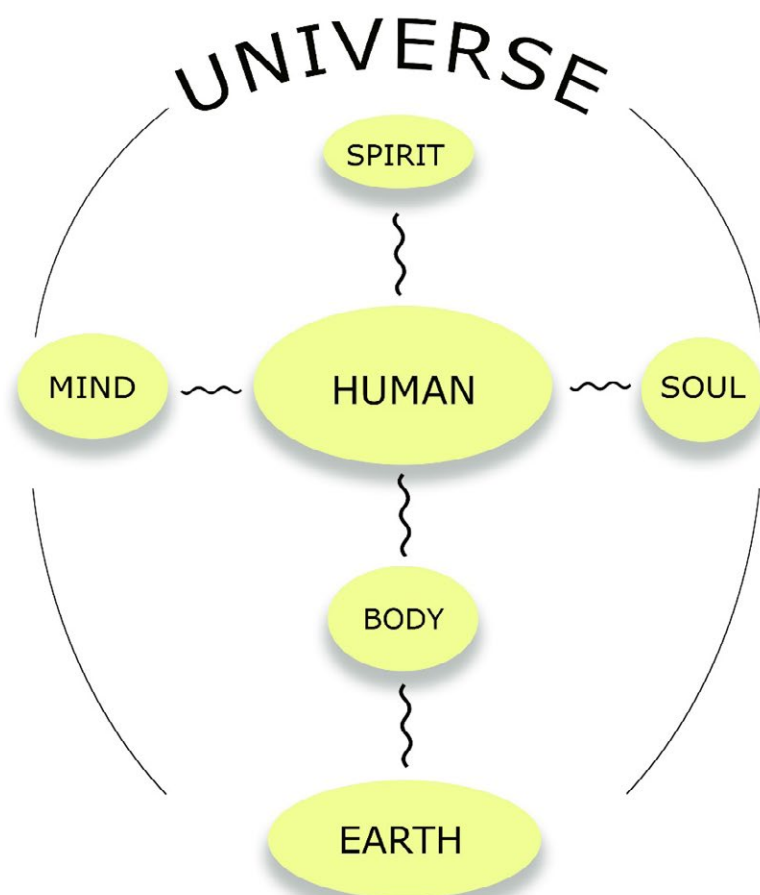
- Imagine that you are teaching about parts of the human body in a foreign language today. Think about how you can address different human elements and their relatedness both to the Earth and to the Universe by teaching the didactic material.

PRESENTATION OF THE LEARNING OUTCOMES

- Please present the lesson to your students. Ask them about their opinion and feelings.



MIND MAP AND BASIC TERMINOLOGY



GOOD PRACTICES

An example of the lesson about how to learn the verb **"to be"** in view of all human elements:

- Begin the lesson with sophrological exercises for the body and for concentration of the mind (See Chapter ...) (exercise for body and mind).
- Teach didactical content about how to conjugate the verb "to be" in different ways by including different human elements, e.g. mind or mind and body.
- Sing the song and dance while singing it for a second time (soul and body).

I am, I am a happy man



You are, you are my good old friend

He is my friend, **she is** my friend

We are good friends, all happyfriends.

- Play a game and pass a ball to each other while playing. The one who passes the ball must say one personal pronoun. The one who receives the ball must conjugate the verb "to be" and continue the sentence by a positive adjective: (mind, body)

The first passer: YOU ... (passes the ball)

The receiver: (takes the ball and says) YOU ARE BEAUTIFUL. WE (passes the ball to the next one)

The receiver: WE ARE BRAVE, etc.

- Take letter stencils and while you are listening to some relaxing music, conjugate the verb „to be“ by using the letter stencils. (mind, soul)
- Stand in a circle, take the hands of those standing next to you and sing the following meditative song. (spirit, soul)

https://www.youtube.com/watch?v=MtaV_MaWl2g

Below you will read about how the concept of human as part of the wholeness—both of the Earth and of the Universe and of human as composed of the elements – spirit, soul, body and mind, has been applied to the methods of fast and efficient learning "NEWave in learning".



HUMAN AS A COGNITIVE BEING

„The brain knows how to learn and comprehend. How does the brain do it – it does not give us any explanation.

If we could understand that, we would learn in another way.”

Tanya Chernigovskaya

OBJECTIVES OF THE TOPIC

After you get familiar with the topic you will be able to:

- To refer some scientific evidence about how the brain operates;
- To define the cognitive process;
- To define some basic brain functions involved in the cognitive process.

VERIFICATION OF THE UNDERSTANDING

- According to your opinion, what is a cognitive process?
- Enumerate different human functions relating to the cognitive process.
- Considering the knowledge obtained so far, how would you improve the results of the cognitive process in your work?

CONTENT INTRODUCTION

The term „**cognitive skills**“ originates from „**cognition**“ [kɒg 'nɪʃən], which means cognitive/mental/intellectual ability, knowledge or competence. „Cognition“ is the act of knowing. **Cognitive psychology** is a branch of psychology concerned with human cognition and intellectual/mental abilities.

Man is the only being on Earth endowed with cognitive processes throughout life. Humans develop their mind (brain) and this enables them to conquer any ecosystem on the planet and go on approaching the Solar System.

How does the brain learn?

We have begun to learn since we were born. What is the secret of developing the brain functions and of improving the mind? It is not about the appearance of new brain cells in the process of our development. David Eagleman – neuroscientist at Stanford University, the scenario-writer and the host of the BBC series „The Brain“, argues that: **„The number of brain cells both in children and in adults is the same.”** So, what is the secret? **The secret is about how these cells (neurons) are interconnected.**

According to him, there is **no connection between neurons** of a baby at birth. These neurons are extremely fast to connect each other in the earliest two years of life, until they obtain sensory information (i.e. information coming



from the senses). Any second, up to 2 million **new connections (synapses) between neurons** are being formed in a child's brain. At the age of 2 years, a child already has 100 trillion synapses – twice as much as an adult. At that age, the child has achieved the maximum number of synapses and it has much more connections in its brain than needed for future. At that time, the formation of new synapses is replaced by **neuronal „cutting down”**. While you are maturing, 50% of your synapses are cut down. **Which synapses are kept, which ones disappear?** The synapses that have not been used are eliminated just like some forest paths. These paths, which have not been used, disappear. Who you become depends on **the neuronal connections (synapses) that are not used** rather than the ones that are used in your brain (Eagleman, 2015).

Namely, these Eagleman's arguments, written in his book „The Brain“, are in accord with the arguments of Prof. Lozanov – Bulgarian scholar who invented suggestology and suggestopedia (1970), stating that **humans have hidden brain resources** or unlimited potential for development.

It is suggested that any individual uses only 15% of their brain capacity. Tatyana Chernigovskaya – doctor of philological and biological sciences in Russia, argues that the brain storage capacity amounts to 5,5 PB or 3 million hour movies, i.e. **300-year continuous watching of movies**. Our brain has a huge, unused capacity.

The researchers have provided evidence that development of the mind through the cognitive process results in **physiological changes of the brain**. The study of Einstein's brain shows enlargement of the brain area responsible for the left hand due to his violin playing ardour. Both education and training contribute to development of the mind considerably. Still, they change the brain physiology. While you are reading this paper, your brain is changed. According to Eagleman, although most brain changes are rather tiny to see with the naked eye, the researchers have found that your experience changes the physical structure of your brain – from the expression of the genes, through the location of molecules to the architecture of neurons. Your family origin, your culture, your friends, your job, any movie you have watched, any conversation you have had – all of them have left their mark on your nervous system. **These indelible tiny marks accumulate so as to make you what you are and protect you against what you could become.**

Prof. Lozanov argues that one of the major limitations of our development is the so-called **„societal suggestion”** or the external conditioning of our individuality. Throughout life we live as if we have limited abilities. We live according to the beliefs that we have about ourselves. **And the truth is that from our birth until our death we are creatures in a process of development** and now, it is time to believe that **„something extraordinary will happen”** (one of suggestopedia laws) and that a human can learn **1000 new French words in a day** (an experiment of Prof. Dr. Lozanov in 1966, published in academic journals).

Cognitive skills are related to the way an individual grasps the world, the way they act in it, the way they learn. Cognitive skills are a range of mental abilities and/or processes. They are part of almost any human action, when we are awake. Cognition is a mental act or the process of obtaining knowledge and understanding through a thought, experience and senses. **Cognitive skills are more closely related to the mechanisms of how we learn, memorize, solve problems and pay attention,** rather than to the ac-



tual knowledge. „**To learn how to learn is the most important thing that we can do**“, Harold Kerry said.

In fact, think about how a child learns and how an adult learns. The small child examines the world. It has **inborn curiosity** and enjoys investigating any surrounding object. It learns while **playing** continuously; it learns while **singing and laughing**. We have strayed from the **natural way of learning**, from the natural psychophysiological brain functioning. In a consciously organized educational process, learning occurs through monotonous repetition of educational content, perceived mainly by the left hemisphere of the brain responsible for the rational mental processes. It is an unnatural way of learning that results in low-quality and short-term memory results, exhaustion, boredom and hence, low self-confidence in achieving much more, in learning a large amount of educational content quickly, easily and joyfully. **When developing educational methods, it is necessary to get closer to the natural psychophysiological functions of the brain.**

The cognitive branch of psychology studies the ways an individual learns and obtains knowledge. Cognitive research work is very helpful to substantially change the approach to consciously organized forms of learning/teaching.

Cognitive process



Fig.1



Basic brain functions involved in the cognitive process

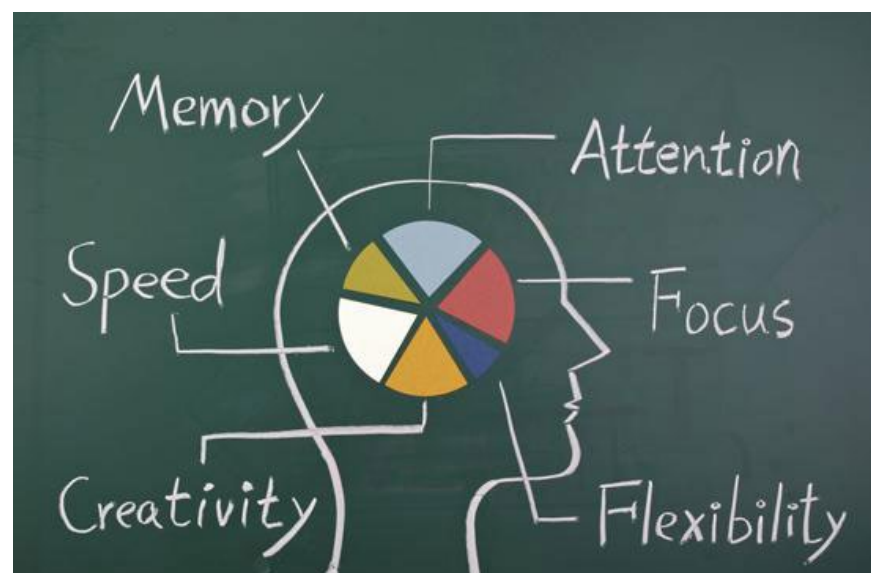


Fig. 2

- **Perception:** recognition and interpretation of sensory stimuli (what we see, smell, touch, taste and hear). It occurs in the sensory memory that receives a large amount of information and keeps it no longer than 3 seconds. Therefore, only a small amount of this information proceeds to the short-term memory.
- **Attention:** the ability to keep concentrated on a certain object, an action or a thought, and the ability to perform more than one task simultaneously.
- **Memory:**
 - Short-term or working memory (limited storage)
 - Long-term memory (unlimited storage).
- **Motor skills:** the ability to use our muscles and bodies, e.g. the ability to move and change objects.
- **Lingual skills:** abilities to pronounce sounds of a certain frequency, length and order, i.e. to say words and generate speech results.
- **Visual and spatial processing:** the capacity to process input visual stimuli, understand spatial relations of objects and visualize images and scenarios.
- **Executive functions:** abilities that allow purposeful behavior, e.g. the ability to plan and perform a task, set and realize a goal/intention. These include:
 - **Flexibility:** the ability to quickly switch modes of the mind.
 - **Theory of the mind:** understanding (intuitive) of other people's subjective world, their plans, what they like and what they do not like.
 - **Expectations:** predictions based on recognition of certain patterns.



- **Problem solving:** recognizing a problem, identifying an appropriate solution, generating different ways to implement a decision, finding the most appropriate way to solve the problem, and decision-making.
- **Decision-making:** the ability to make a decision based on problem solving under conditions of deficit of information and involvement of emotions (our emotions and/or others' emotions).
- **Working memory:** the capacity to store and process ongoing information.
- **Emotional control:** the ability to recognize and define one's own emotions to improve performance.
- **Arrangement:** the ability to break complex activities to smaller and more manageable ones and to prioritize so as to achieve a goal.
- **Suppression (inhibition):** the ability to withstand distraction of attention and the pressure of inner impulses.



Cognitive abilities

Fig. 3

The figure illustrates basic cognitive abilities: memory, attention, focus, speed, flexibility, creativity. The **cognitive abilities are not fixed**. They **can be developed** through our lifestyle and also through purposeful actions and practice. Some cognitive skills tend to decline with age, especially the so-called executive functions and those cognitive skills that have not been regularly used. Fortunately, some observations and studies show that the decline of cognitive skills can be slowed down, stopped or even turned by an appropriate lifestyle and practices.

Some experiments demonstrated that if we maintained the cognitive functions of the brain, when some neurons die, some other neurons could be involved in the neuronal network. We cannot stop the process of



aging. Still, we can slow aging down by applying all skills from our cognitive toolbox. Researchers have provided evidence that the cognitive processes can protect the brain against illness relating to decline in brain functions, such as Alzheimer, dementia, etc.

In the "NEWave in learning" methods we have paid special attention to the **brain functions**, since we argue that if we take into consideration the latest findings about how the brain learns, we can achieve unexpected efficiency. The latest 10 years have been years of a **boom in research findings** about the brain. We warmly advise our readers to take an interest in them. These findings may turn out a **key for the „mystical“ human development**.

It is exactly the knowledge about psychophysiological functions of the brain that underlies the development of suggestology and suggestopedia by Prof. Lozanov – the basic methodology of the fast and efficient learning „NEWave in learning“ methods.

GAMES AND TASKS

- What determines the development of your mind?
- Why is the cognitive process crucial for functioning of the brain?
- Enumerate various learning styles that approximate as much as possible the natural learning process in early childhood.
- Watch some of David Eagleman's BBC series "The Brain".

PRESENTATION OF THE LEARNING OUTCOMES

- Give an example about how you can use a part of what you have learnt from this topic in one of your lessons.

GOOD PRACTICES

Prof. Dr. Georgi Lozanov, the founder of suggestology and suggestopedia, was a psychiatrist and a physiologist of the brain at the Bulgarian Academy of Sciences. Grounding on his knowledge in the domain of brain, he invented, developed and found evidences for suggestopedia – an exclusively efficient system for fast learning of foreign languages. In 1966 he made an experiment with participants of different social and professional background, who succeeded in learning 1000 new French words in a day at 98,08% achievement rate.

PRACTICAL APPLICATION

Below you will read about how the facts relating to brain functioning have been applied to the development and implementation of the methods of fast and efficient learning „NEWave in learning“.



HOW THE BRAINLEARNS FAST

"Learning how to learn is the most important thing we can do."

Harold Kerry

OBJECTIVES OF THE TOPIC

After you get familiar with the topic you will be able:

- To organize in a structured, concise and clear way the knowledge about how the brain learns;
- Apply the principles of the „accelerated Learning“ method;
- Present learning content through Tony Buzan's thinking maps.

VERIFICATION OF THE UNDERSTANDING

In a group or by yourself, discuss and record the answers to the following questions and tasks:

- Write down what you know about how the brain learns.
- What factors do you think would speed up the learning process?
- List as many learning styles as possible.

CONTENT INTRODUCTION

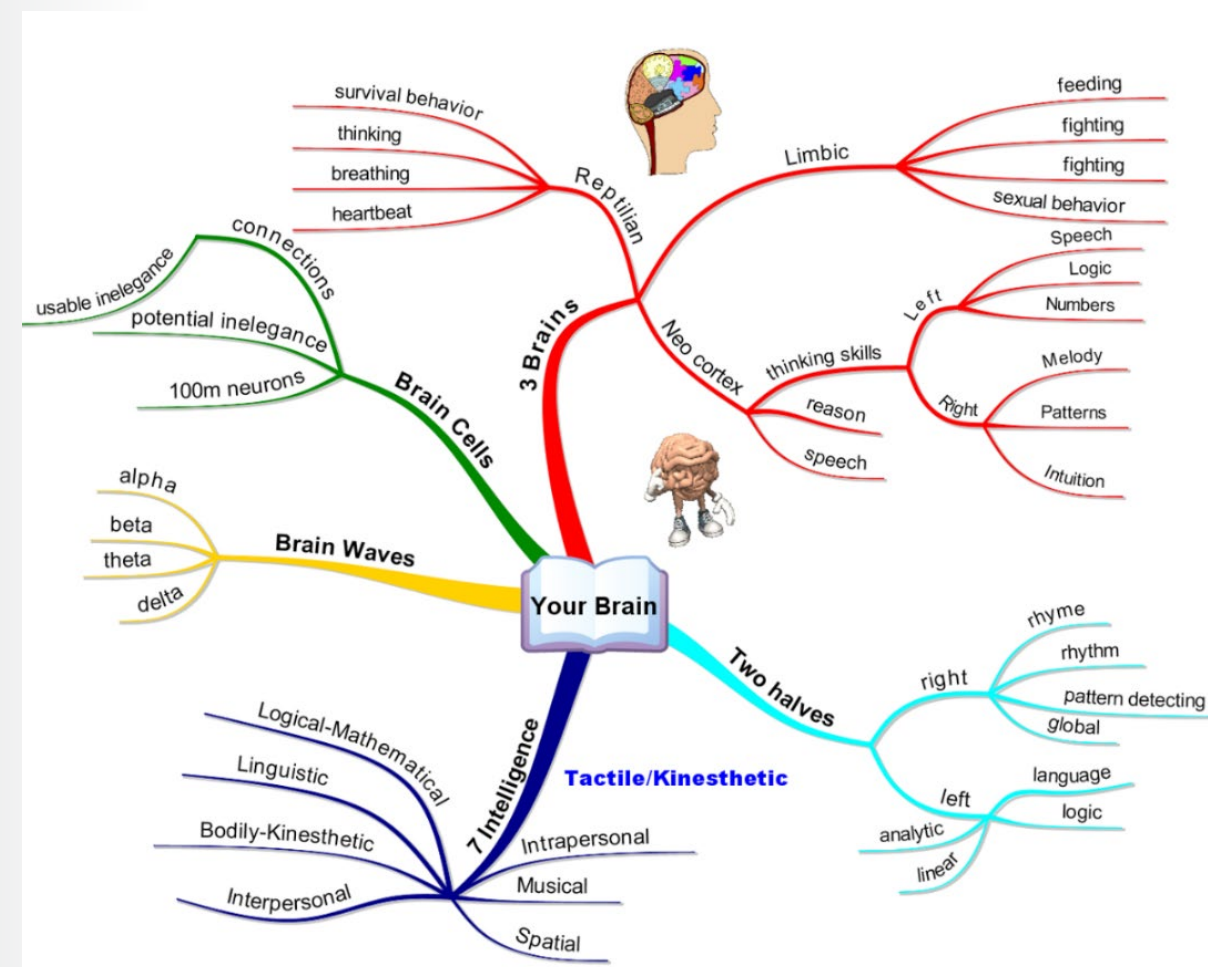
During the development of suggestology and suggestopedy in the 70s of the last century, Prof. Dr. Lozanov began his profound knowledge in the field of physiology of the brain as a psychiatrist and neurologist at the Bulgarian Academy of Sciences. The main scientific findings on which he constructs the suggestive system of teaching can be found in the chapter „Suggestopedia“.

Over the last 10 years, scientists have uncovered many facts about how the brain is learning. For the purpose of effective teaching, the successful trainer needs to be familiar with the cognitive ability of the brain.

To illustrate the information we will use the mind maps of Tony Buzan (The Mind Map Book, Tony Buzan) in order to demonstrate how intricate information becomes easy to understand and remember from people who are not specialists on the subject. It is recommended that Tony Buzan's mental cards will be used in every convenient case in the teaching profession. This is another great learning tool that you will become familiar with in the working process.



fig.1



- The brain consists of three major parts - neocortex, reptilian, and limbic brain, in which different brain processes are performed.
- Neocortex consists of left and right hemispheres.
- Brain radiates alpha, beta, theta and delta waves. Theta and delta waves are transmitted in the sleep state. Bright waves and alpha waves are emitted. Alpha waves are characteristic of a relaxing state.
- The brain is made up of trillions of neurons (cells), connections between them (synapses) where electrochemical impulses are carried out with the help of chemicals called neurotransmitters and the possibility of neuronal connections.



fig.2

Your Three Brains

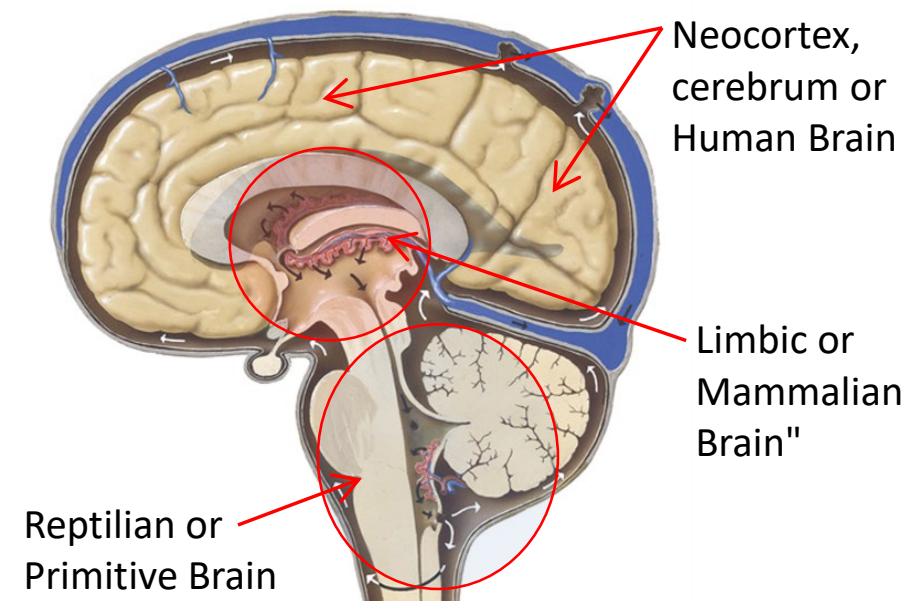


fig.3

Your Three Brains 2

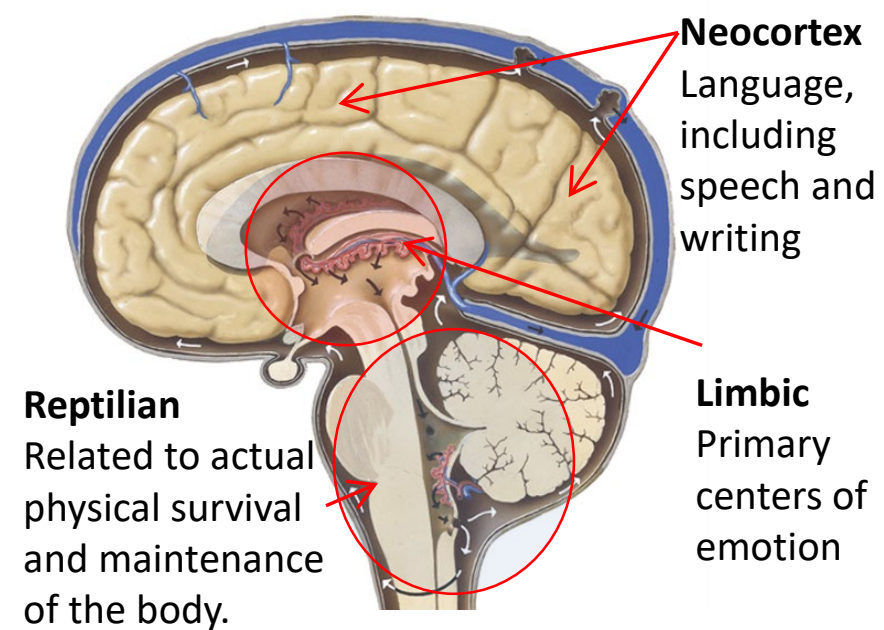
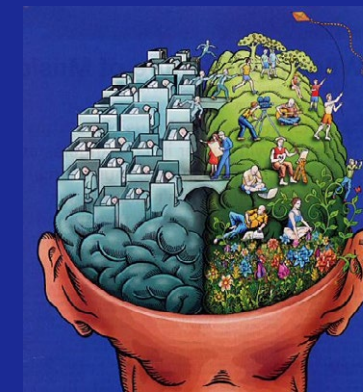


fig.4

Left and Right Brain

Left Brain
Logical
Sequential
Rational
Analytical
Objective
Looks at parts



Right Brain
Random
Intuitive
Holistic
Synthesizing
Subjective
Looks at wholes

fig.5

Your Memory

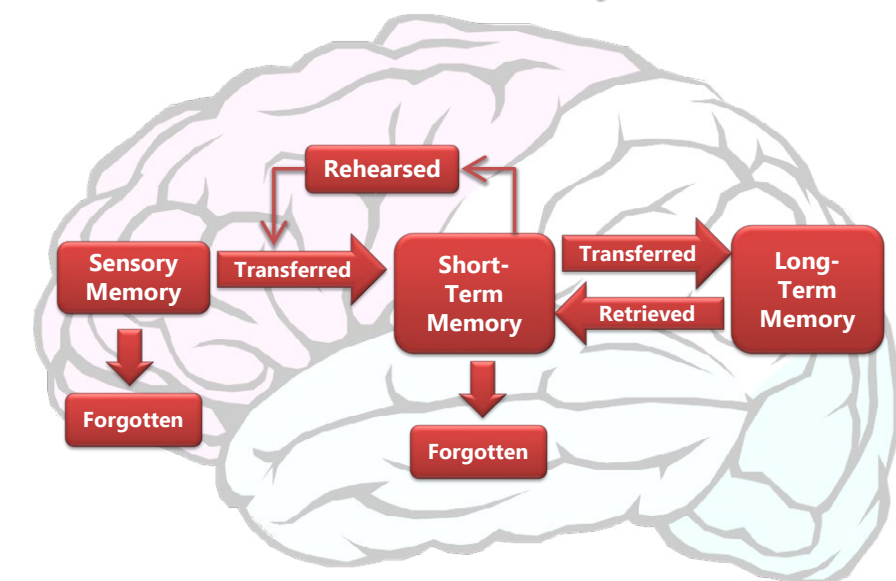




fig.6

6 Step **M. A. S. T. E. R.** Plan To Accelerated Learning

- 1 – Relaxed **M**ind
- 2 – **A**cquire Facts
- 3 – **S**earch Out The Meaning
- 4 – **T**rigger Memory
- 5 – **E**xhibit What You Know
- 6 – **R**eflect On What You Know



fig.7

1 – Relaxed **M**ind



fig.8

2 – **A**cquire Facts

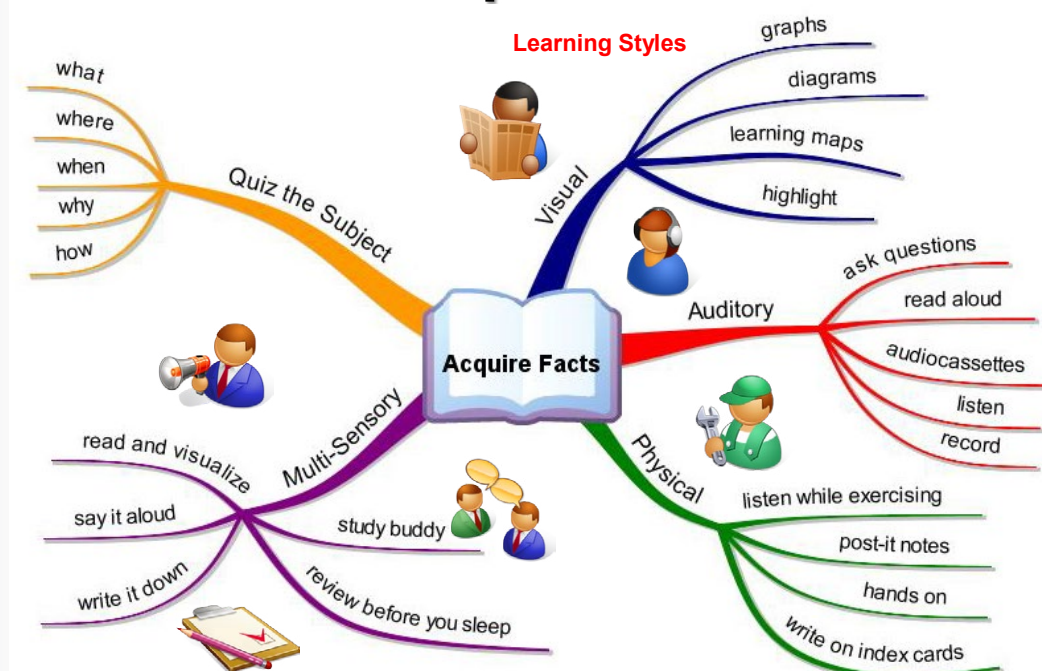


fig.9

Learning Styles



Visual



Auditory



**Kinesthetic
(Physical)**

Find a subject's natural order of learning

- Our eyes can process much faster than our ears.
- Processing a picture is much faster than reading a paragraph with its hundreds of symbols.
- Pondering the meaning of new information is crucial to mastering it. Ponder time should be up to the student, not the teacher or the electronic delivery.



fig.10

Multi-Sensory Learning

On an average we remember...



fig.11

3 – Search Out The Meaning

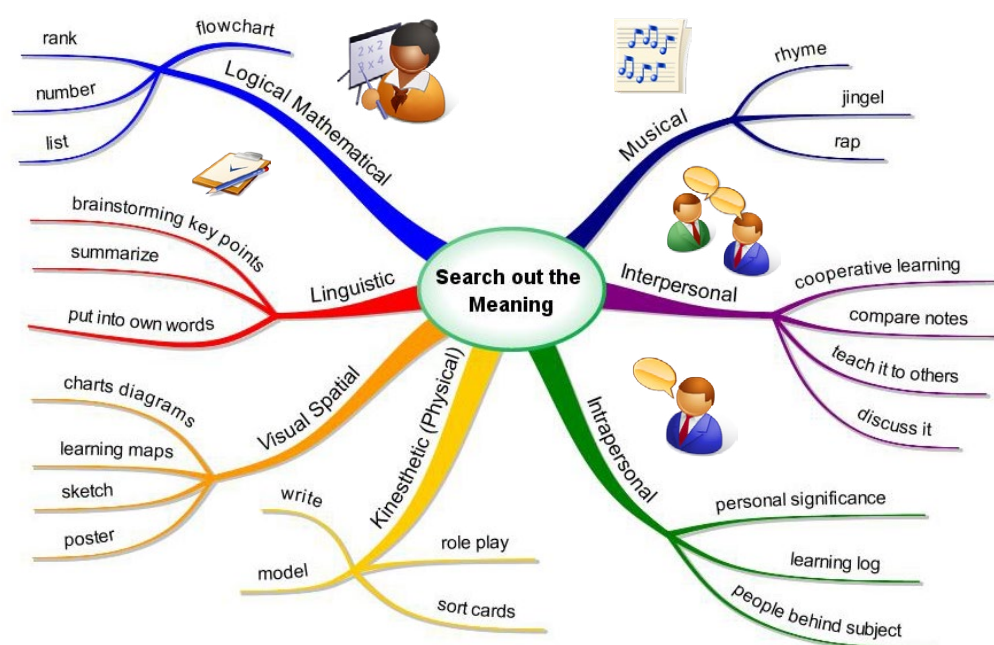


fig.12

No Learning Without Emotion!

Emotion forms the cement of memory Emotion generates the motivation for learning

- Pondering adds emotion to what is being learned
- Positive and productive emotions aid learning
- Negative emotions can block learning
- When a purposeful choice is required, emotion comes into play
- Something viewed as valuable brings emotion to the table



fig.13

4 – Trigger Memory

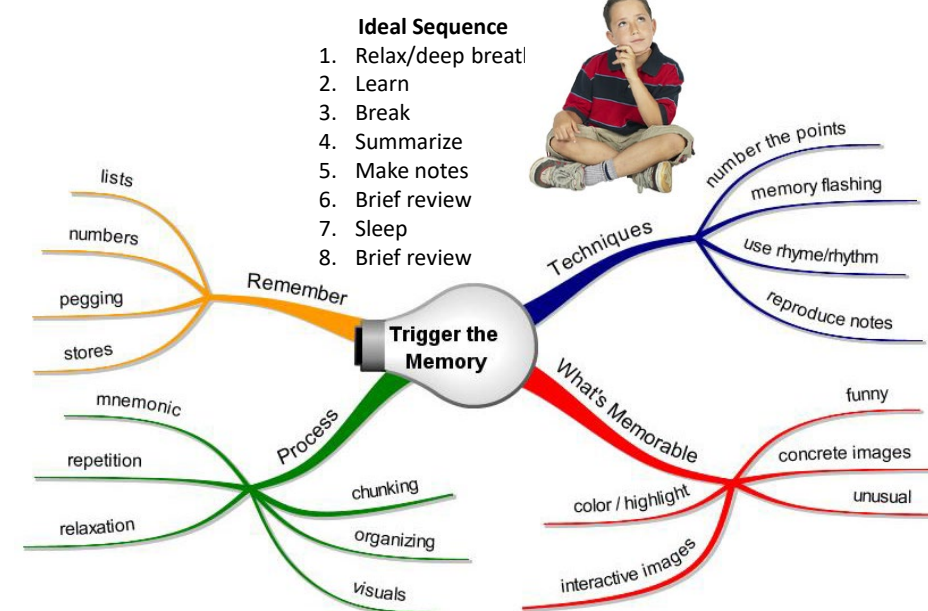




fig.14

5 – Exhibit What You Know

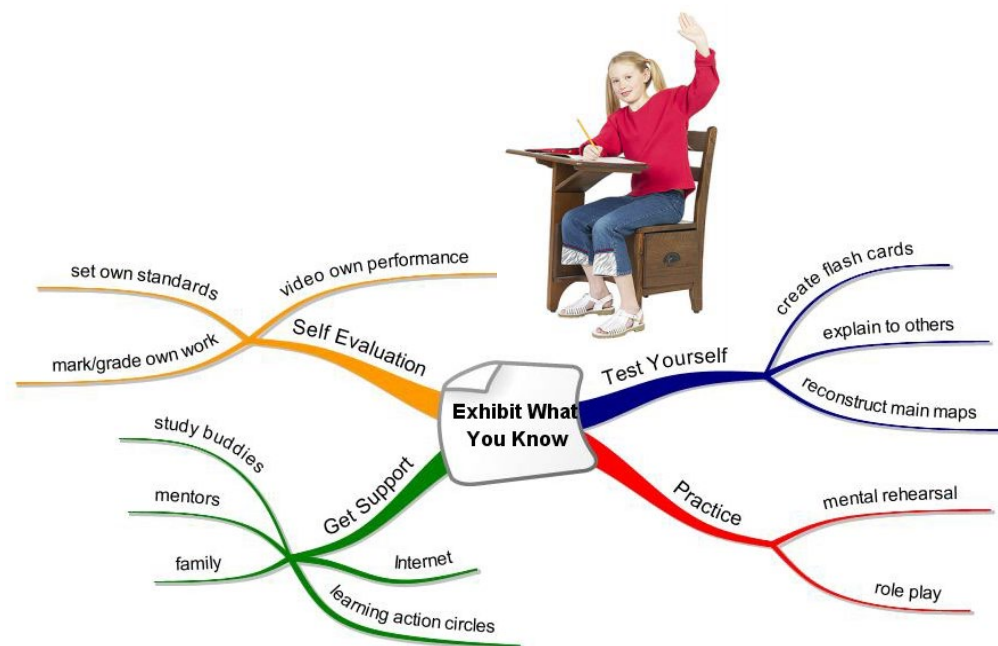


fig.15

Summary

1. You can learn **anything you want to learn**
2. Learning **how to learn** is the most important thing you can do
3. You can **learn faster** by knowing how the brain works
4. To **earn more** you need to learn more
5. You can **achieve any goal** by developing the skill needed to achieve it

with **Accelerated Learning**



GAMES AND TASKS

- Which steps of the M.A.S.T.E.R. accelerated learning plan have we used in the development of this chapter?
- Mark with a marker in the mind cards these elements of learning in "Kow is learning brain" that you use consciously or unconsciously in your teaching work.
- What you would change in your work to turn the right half of the brain more actively?

PRESENTATION OF THE LEARNING OUTCOMES

- Create a common mind map of everything you remember from this topic.

MIND MAP AND BASIC TERMINOLOGY

6 Step **M. A. S. T. E. R.** Plan To Accelerated Learning

- 1 – Relaxed **M**ind
- 2 – **A**cquire Facts
- 3 – **S**earch Out The Meaning
- 4 – **T**igger Memory
- 5 – **E**xhibit What You Know
- 6 – **R**eflect On What You Know



GOOD PRACTICES

"Accelerative learning" is an American learning system, whose parent is suggestopedia, was created 30 years ago by American teachers who had the honor of being trained by Prof. Lozanov. Two years ago, they visited Bulgaria at our invitation and introduced us to the development of the Accelerated learning system. Their practice is very successful and they apply the system of accelerated learning, both in adult education and in schools and corporations. More information on accelerated learning can be found at www.realeducation4all.com

PRACTICAL APPLICATION

"It used to be that the main difference between people in our society was between those who "have more" versus those who "have less". Today however, the difference is between those who "know more" and those "who know less", says Brian Tracy



Learning how to learn needs to take priority over what we learn...

Learning how to think logically and creativity is critical if we are to solve complex personal and social problems effectively.

The understanding of how the brain learns quickly, easily and efficiently is of particular importance for future teaching system that has the challenge of preparing trainees for the professions of the future. Studies show that around 83,000 jobs will disappear in the future. At the same time, information is distributed in the digital universe, which equates to over 50 gigabytes for each person on Earth. The population of the Earth is approximately 7.5 milliards.

Current „NEWave in Learning“ methodology, in addition to providing tools for learning how to learn, also provides a methodology for acquiring 3 to 5 times more information than the average statistical standard currently adopted.



FACTORS OF THE EDUCATIONAL ENVIRONMENT

INFLUENCING COGNITIVE PROCESS

„The senses are instrument for meeting the world.“

Albert Soesman



OBJECTIVES OF THE TOPIC

After you get familiar with the topic you will be able:

- To describe which are the educational environment factors influencing the cognitive process;
- To use the new knowledge in your pedagogical practice.

VERIFICATION OF THE UNDERSTANDING

- What do you think, which are the educational environment factors influencing the cognitive process?

CONTENT INTRODUCTION

A person perceives information from the outside world through his senses. **The senses are a tool to meet the world**, that has to be considered and analyzed together. From antiquity are known five senses – **vision, hearing, the sense of smell, taste, touch**. Some pedagogical theories, like Rudolf Steiner's, and some contemporary research, identify more senses, but we will focus on the well-known vision, hearing, the sense of smell, taste and touch.

We are all connected to the world thanks to our sensory organs. People have an illusion of immediate access to the world through their senses, but this sensation is not true. We can not understand the world unless our senses convey their signals to the brain. **All the process happens in the brain**. The brain has no access to the outside world. Trapped in the dark, silent chamber of our skull, our brain has never had direct experience with the outside world and there will never be any. There is only one way this information from the outside to reach the brain. **The sensory organs – eyes, ears, nose, mouth and the sense of touch act like translators**. They catch photons, air waves, pressure, temperature and convert them into electrochemical impulses and signals. From these impulses we get a picture, sound, feeling etc. **The whole idea of the world reproduces in our brain**, with some delay, the brain needs it to synchronize different senses signals, because the brain processes them for a different time. According to David Igelman – neuroscientist from Stanford university, this means that we don't perceive physical reality but an interpretation of it, reproduced from our brain with some delay. Our conscious lags from the physical world. The next event is at a distance from our conscious experience of it. **Our experience of reality is the ultimate creation of the brain.**

Professor Lozanov – the developer of suggestopedia, on which steps methodology "NEWave in learning", talks about the **suggestopedic environment**



as important part of suggestopedic education, but in his works, we can't find thorough information for the elements of the educational environment and their perception of the human senses (more precisely of the human brain). That is why our team enrich suggestopedic theory with the following information, which should be kept in mind in the educational courses.

The environment where we live, communicate and learn is formed by colors, shapes, materials and many other elements, **that stimulate our senses. They create different emotions and reveal different our qualities depending on how they are combined.**

The question is how teachers can create suitable conditions for usage of all the senses in the educational process as a source of information and knowledge for the outside world and to draw conclusions in the processes of monitoring of their display.

LEARNING ENVIRONMENT FACTORS AFFECTING COGNITIVE PROCESSES

Factors perceived by vision:

- colors
- lights
- shapes
- images
- apparel

Factors perceived by hearing:

- music
- background noise

Factors perceived by the sense of smell:

- smell
- air

Factors perceived by the sense of touch:

- air temperature
- humidity
- furniture



- fabrics
- apparel

1. Factor perceived by the sight

1.1. Color

From all the forms of nonverbal communication **color is the shortest and fastest method** of delivering messages and knowledge. Before appreciation of the aesthetical side of the colors there were many more practical aspects of communication with color. Our survival depended on our ability to distinguish objects and/or alert signs, animals, plants or non-living nature and the color is an integral part from the identification process. In addition to everything else the color stimulates and works synergetic with all our senses, symbolizes abstract ideas and thoughts, expresses fantasies or wishes, forewords to another time and place and **causes aesthetic and emotional answer**.

According to Rudolf Steiner, **the infinite wealth of colours has liberating and therapeutic impact**, which helps the soul to find its orientation and to activate the human will. It is hard to describe how crucial for the future of the human life is the advanced skill for **feeling the colors**. We talk about inner wealth not about skill which we could get in hands. Rudolf Steiner says that all the world changes in the eyes of that who learned to feel and understand the language of 79 colors, **not in an intellectual manner but with the deep understanding and feeling of the matter of colors**.

The colouring

The colouring in the slide-spatial environment is considered as **a complete system of multiple colors**. The color is directly connected to the space. Same authors define color culture as culture of utilization of space. The usage of colouring in the architecture and interior design is so common that there are colouring specialists.

The color and the space

Depending on the situation of the volume-spatial form in the space the color may change a lot its activity. In case of **remoteness** of the viewer **the color activity** of the form **reduces** and is perceived as **colder**. In the opposite case **in accession the color enhances and gets a warmer shade**.

The color and the chiaroscuro

The chiaroscuro can be stronger and then it more actively changes the impact of colors. In **the highlighted part** the colors are **more intensive** and in **the shaded** – the intensity decreases to **achromatic effect** (the apperception of the exact world is lost).



The color, geometric and stereometric form

Some researchers find associative connections between the color and the geometrical form. The weight and opacity of the **red color** are associated with the weight and statics of the **square**. Weightless character of the triangle relates to the **yellow color** and continuity of the **circle** – with the **blue**. It is considered that **trapezium** corresponds to the **orange color**, **triangle with rounded peaks** to the **green color** and **ellipse** to the **violet color**. In stereometric forms **the red color** relates to the **cube**, **yellow** – to the **pyramid** and **the blue** – to the **sphere**. To some extent the associations described could be explained with the usual color characteristics of nature's forms, they are part of the genetic vision formed in the human.

Emotional effect of the colors

„The role of colors in all forms of life is too obvious to be denied or neglected“, claims Faber Biren – American explorer colorist. Something more – they have a part in human communication, say current color consultants. Given that **55% of human communication is visual expression and perception and only 7% verbally**, **imagine the role of the colors for us**. But what actually do they do? The colors are the most elusive part of the communication, that part makes you feel and react spontaneously rather than think and analyze.

According to the scientific statements **they are pure energy** that brings life because it is a form of light. We are influenced by colors around us and the people we are communicating with are influenced by the colors in which we present ourselves. The interior of a room, the tones of our clothes can make a person to trust us from the very first moment or make him feel tension during our communication. The colors are very important element of a room's interior and the teacher's clothing.

The concept of colors' impact was first developed by Johann Wolfgang von Goethe. According to him all the dark colors rest and the light colors excite as they influence on physical and psychical level. It has been proven that colors influence blood pressure – it goes down by the blue and green colors and goes up by the yellow and red.

The red color always influences on the physical condition, yellow – mental condition and grey on the emotions.

Observing different types of people Faber Biren, application of the color expert, concluded that the introverts are less sensitive to colors. On the contrary, more emotional people react adequately to colors. People that like grey color prefer to take a rest while the workaholics will avoid it.



Red

At the sight of the red color triggers the pituitary. A chemical message is sent to the adrenal glands and releases the hormone epinephrine (adrenalin). This leads to shallow breathing, increase in blood pressure, rapid pulse, palpitation. These processes are physiological, and we can't control them. As a result, the red color is indelibly connected with the human brain, with excitement and high levels of energy. Warm tones are highly stimulating and the red color creates more powerful effect.

Pink

Depending on its value and brightness the pink color adds a variety of mood swings. Alive, shocking or hot, pink colors share the same strongly energizing effect of the red color. They revitalize and create sense of movement and wild passion. The pink color makes associations with sweet taste and smell, health and optimism - „take a look at the world through pink glasses“.

Orange

The orange color is considered the hottest of all – bright and vibrant. Playful, sociable, cheerful and childish. The children between three and six years old are addicted to it and adolescents too. The orange color has part of the drama of the red, tempered by the cheerful humour of the yellow. All three colors influence the autonomic nervous system that, in turns, stimulates the appetite.

Yellow

In any society the yellow color connects to the brilliance and the heat of the Sun. Yellow is equated with imagination and enlightenment. In its faint light variants, it is perceived as lively and soft to the touch and in its most saturated and bright tones – more energizing and attracting eyes. Unlike other colors that sink in saturation, the yellow color becomes more vivid. It is associated with the citrus, sweet and sour flavours. Of all color combinations in nature people cannot neglect the yellow and black color because of their association with danger.

Brown

Brown is the color of Earth, it is connected to home and hearth, matter and sustainability. Although it is perceived as boring color, brown creates a sense of tranquillity and warmth. It is very important in the food industry as a characteristic of chocolate, coffee, bread etc.



Blue

The blue color is strongly associated with water and sky that's why it is constant presence in our life. It relates to reliability, security, responsibility, inspires trust and confidence. When our sight is directed to the blue color the brain sends chemical signals that act as a sedative. The blue is perfect choice of color for spaces, requiring concentration, relaxation or meditation. Deep blue tones add prestige and credibility, whereas brilliant variations – dynamics, dramatism and liveliness.

Green

Of all the colors in the visible spectrum the green offers the most extensive range of possibilities. Blue-green tones always cause positive answer and even though they are considered to be cold, they lead to pleasant associations for grass and the warmth of the tropical waters. The green color is associated with nature in general and it is its symbol. Mint green color acts refreshing. Dark tones are associated with money, prestige and security. Yellow-green colors are bright and attract the eye, all children like them although they can be associated with disease and sickness. The green color in general has cooling and soothing effect.

Purple

The purple color is superb but complex color preferred by many creative and eccentric characters. It may have different meanings – from contemplative and meditative, to royal. At the same time sensual and spiritual, combination of red and blue color, purple color is mysterious, nostalgic and elegant.

Neutral (achromatic) colors

Neutral tones of beige, grey and grey with tints of brown give a sense of reliability. They are associated with time, antiquity and the endurance of the ancient buildings. Neutral colors are solid, durable, timeless and most of all – classic. They are considered „safe“ and unrelated.

White

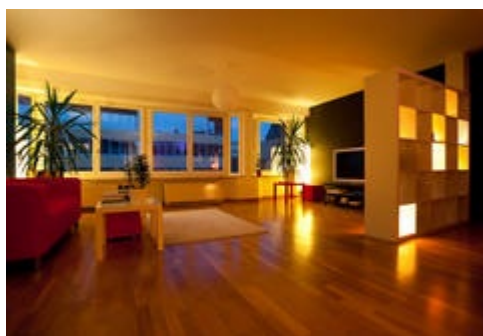
The white color symbolizes purity and simplicity. Pure white color is symbol of the absolute minimalism. Human eye perceives the white as brilliant color for its reflecting ability. Serves well as a contrast.

Black

The black color is associated with the mysteries of the night. The black is dramatic, strong, elegant, stylish and expensive. These positive associations are more common than those connected with grief, sorrow and anguish. As a color that devours light black weighs more visually than the other colors. Black and white color are the perfect contrast combination of power and clarity, power and purity.



1.2. Light



The different sources of light provoke different emotions in people. It has been proven that **the spectrum of light affects the people's mood** and the perception on the surrounding objects. The higher the temperature of heating in the bulb and the more in its spectrum have **blue color, the clearer the eyes perceive** the contours of the objects. Such visual effect has **fluorescent lamps**. In contrast, **the low-temperature sources of light do not allow the eyes to focus** on the images and wash away contours.

Proceeding from this we can choose the mood in one or another room and after that we can specify the sources of light.

For a cheerful, festive, bright or business atmosphere is better to choose the high-temperature lamps – fluorescent or halogen, whereas for a relaxing and warm atmosphere we better choose low-temperature sources with yellow light.

A lot of people use mixt lighting in one and the same room – for the main attic lighting they choose high-temperature lamps and for the walls – low-temperature.

When we choose lighting fixture and lamps we better have in mind the colors of the interior – walls, furniture, carpets etc. Otherwise the warm yellow light from the bulbs can transform the blue color of the interior in grey, and the cold blue light of bulbs can ruin the good impression of the furniture. Under the bright lights blue color and its nuances look darker and the green, red and orange color look brighter. The intense light makes violet color dark red with wine hue, the red becomes more intense and the blue loses its brightness.

The light could be used as antidepressant if you observe a few important conditions for its use: the central source must emit white light and the additional lighting (floor lamps and wall lamps) – yellow light.

The light is a key factor for the achievement of the desired atmosphere. The proper combination of the amount of light and the color range is a must for the good interior design.

The layout of the rooms is of great importance. For example, a room exposed to the east with bright light early in the morning will look radically different in the evening under artificial light. Room exposed to the west, that is il-



luminated by the golden light from the sunset may look colorless and dark in the morning. When you can't choose the right colors, the interior designers advise to paint walls first in white and when you see how natural light affects the interior then you can change the color of the walls.

The rooms facing north must be comfortable. The light is steady and weak, therefore these premises are used for workshops for fine arts in the training environment, but if they aren't the interior will look lighter in pale and warm colors. The muted color tones look good on different types of plaster for the walls.

The rooms facing south look good in neutral tones, combined with blue or grey. White translucent curtains would soften the strong sunlight and will protect the furniture and the carpet from fading and in the same time the room will stay sufficiently well lit. If you use warm colors like yellow, orange and red you'd better choose their lighter shades, the walls will look well in every pale tint but with.

The eastern exposure of the room requires the use of light-tight curtains for the bedroom, but in an educational environment the better choice is translucent curtains, if any. The combination of warm color of the cabinets and the bright morning light give energy to the people.

1.3. Shape

Shape and shape formation in the design are essential and are subordinated first to the function of the matter. In the sphere of the design shape formation is a process of organization. Of course, **every shape carries a message, emotion, acts** and changes the space around, interacting with it.

Suggestopedic environment, in the sense of furniture and objects, should be a continuation of the method conception, i.e. to be determined by him; to bring calmness, comfort, to be easy for use of every participant, i.e. to be multifunctional and/or on modular principle, to be welcoming and friendly. The soft, rounded shapes in combination with the appropriate colors would contribute to the calm and comfortable atmosphere of safety. Inspiration from nature is a good choice.

When we talk about shape and shape formation we can't miss the **composition**. The composition is an instrument to achieving, through the art and design, **mental and emotional adaptation of a person to the world**.

The laws of **composition** are analogical with the laws of perception of the space and time from the human psyche. They fully comply with the laws of psychology and totally obey them.

The law for the whole – the composition must be organized in a way to be a unified organic system.

The law on the part – this is the choice of the main elements, of the parts of



the composition.

The law of the contrasts – for unity and struggle of the opposites.

1.4. Images

The paintings and the panels on the walls are main source of information in the educational process. If a painting makes you feel good this is because of **the color scheme, the images** and **the artist's feelings**.

The colors of the images

If you choose a painting for the walls in the educational room you should prefer one in which **light tones** predominate. They are more beneficial and peace-loving. You would like to have a painting in dark tones – maybe you are stressed, or these are the first signs of depression. It is well-known true that different colors have different affect on us: the soothing blue and green create harmony in the body and heal nerves, whereas stimulating colors (red, orange and yellow) give energy to the people when they are tired and exhausted.

Pictured

You can't feel good if the painting is in nice tones, but the pictured is something sad (faded flower or a bird with broken wing). The smile on the face on the portrait **brings optimism** and have a better influence on person that contemplate it, than a beautifully painted but sad face.

The healing pictures

According to occult teachings, paintings carriers of specific energies influence our physical and mental health. In case of appropriate choice of colors they have healing affect on the entire human body and on the different organs. Common symbols in them are the monad, the double helix (with S-shape), that create positive energy field. Known source of inspiration, meditation and healing are the mandals, created in the spirit of the Tibetan beliefs. They are in the shape of circle, concentric circles, figures in circles etc. When people observe them feel rush of bliss. They can be drowned or made from different materials.

1.5. Apparel

Every kind of garment has its history and a historical reason to be what it is today. Knowing the basic types of clothing and their proper applications will help you in your daily choices of clothing as well as in choosing them for different special events. You should treat your clothes with special attention and thought. **Every day, while deciding what to wear, you decide how to introduce yourself to the people you meet. Knowing why you wear certain clothes and what a subconscious message they send to people is powerful.** Even some of the designers, when creating new collections of clothing, are moderately



brave, taking into account the preferences of the clients.

For example, if you wear white apron that belongs to a doctor, your attention to others will be sharply raised. But if you wear a white apron and you know that it belongs to an artist, such a change in your behavior will not occur. Scientists who study the so-called cognition associated with clothes, or the effects of clothes on acquiring knowledge and solving problems claim that such an effect is achieved only if the garment is put on, and one realizes the symbolism it carries. For example, that doctors are caring and are paying attention to their patients, but on the other hand are very demanding. The result of this research is further evidence that we think not only with our minds but also with our bodies.

In suggestopedia, clothing and accessories are of great importance. Through clothing, in the process of dressing and changing clothes the teacher has the opportunity to play different role each time. By dressing for the particular lesson, the learners' different senses are stimulated. Therefore, it is extremely important that the apparel during the lesson could influence emotionally and impress the audience. And if so, the process of remembering is much easier. During the concert sessions in suggestopie the apparel is obligatory solemn.

2. Factors perceived by hearing

2.1. Music

„Music is the only universal language that doesn't need translation.

In this language the soul talks to the soul."

B. Auerbach

Besides the word people can give information through the music, therefore in suggestopedic method for education have a lot of songs, and their purpose, besides purely aesthetic and emotional, is didactic too. Other channel in which information flows is motion, therefore in suggestopedy there is dance too. Classical art is seriously covered in this methodics. The concert sessions, with classical music as background, is the uniqueness of the method. Pictures and films are also used – all the wealth of humankind from the big scene is used in suggestopedic method and becomes available for students and teachers.

Medical studies show that while listening to music in people's body releases



es the hormone **endorphin**. This is the natural hormone of happiness in the human body. When a person listens to music it is first perceived and processed in the brain stem. This process takes place **unconsciously** for the individual. People become aware of the information and can perceive it when it reaches the auditory cortex. Children dealing with music, for instance, **don't have difficulties with learning foreign languages** and after that to late age have no hearing problems. People who are engaged in music have the ability **to concentrate faster and easier**.

The music is some kind of stimulus for the brain. The list of the positive effects of music on the body is very long, but most of all it makes people happy. „**Music is the bridge between emotion and cognition**“, says Mary Terventi, researcher from Helsinki, who makes study on the benefits of listening to music in the treatment of neuropsychological disorders. She notices faster recovery of patients listening different songs and melodies, compared to these who are running the course of treatment without music. When listening to music in human body emanates different hormones, that make people happy, it also stimulates the immune system and has positive affect on the therapy. Other studies have shown that music enhances the self-control and cooperativeness, increases emotional competence and the ability of an individual **to learn faster new information**. It stimulates the executive functions. This is the ability that people need to control their behavior. According to the scientists music affects human brain because its perception takes part in the limbic system of the brain. The emotions are processed in this part of the brain. In other words, music affects the individual, unlocking different emotions in him. A melody could make us happy, other – sad. The experience of emotions in educational process leads to permanently memorizing of information unconsciously.

In today's rapidly changing reality for the realization on the labor market are more important qualities as imagination, creativity, ability to work in situation of ambiguity and complexity and the ability of critical assessment. Musical education develops not only these qualities, but also skills and habits for monitoring, involving all the senses in the learning, resolving issues through research, ability to make connections, identifying images, showing empathy, creating meaning, synthesizing knowledge, reflection and evaluation.

3. Factors perceived by the sense of smell:

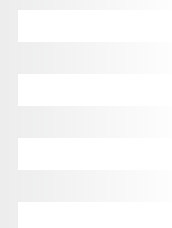
1.1. Smells

Information received from all sensory organs is processed in certain areas of the brain. It is claimed that **the sense of smell is most closely connected to the transmission of information and its memorization** and is our strongest sensory system. Our sense of smell is not just "for the luxury". To make sure that this is true let's see some details about the olfactory information. The brain



centre of smell has received the name **"olfactory bulb"**. **Its cells are able to recover throughout the human life.** This means that the olfactory centre of our brain has different status from all other structures. Its neurons build connections in between even in old age. So, it is logical to assume that our ability to distinguish between the different smells plays a particularly important role. Olfactory system in our brain has more direct links to the memory and the emotions, than all other sensory systems. "Sens" means feeling. This is "the oldest" part of the brain of every living being. It is the sense of smell that has helped (and still is helping) people and animals in searching for food. It prevents from dangers, helps to find the sex partner. The smell can bring back some memories of the person and these memories could affect his behavior. **It is claimed that people's mood and health could be provoked by smells.** Scientists have already had many statistics about the influence of the smells on human behavior. We are going to show you some interesting examples. A woman became an unwilling witness of a man's death from heart attack and the man had used a lot of scent. After this incident the woman felt bad and had hypertensive crisis every time she smells this fragrance. The attack disappeared immediately after disappearance of the source of the fragrance. Another woman suddenly would become very evil and would start to argue with everyone when she feels the smell of wellies. This reaction was because of her older brother who wore wellies and often mocked her. Third woman suffered a lot from her angry husband. Suddenly, she discovered that the smell of milk calms him down immediately. It turned out that when he was a child his family was very poor, and the smell of milk was a smell of satiation and happiness. Discovering this instrument all the family members – children, woman and the man himself became very calm.

From the information exposed we can make a conclusion, **that the smell can actively be used for retention of information. There are a lot of aspects in which the sense of smell and retention are connected.** Ideas that some essential oils could stimulate memory and concentration are known from I B.C. Amongst the strongest essential oils are **basil, mint and rosemary** – essential oils with strong and penetrating smells. It is not about bringing back certain memories by association with some of these smells, but rather about improvement of our ability to memorize. It is in direct connection with the process of learning, big part of which is based on our abilities to memorize different facts. The concentration is also connected to the memory and learning. In case you have difficulties with concentration and your ability to memorize, it will be significantly improved.





3.1. Air

Oxygen is of great importance for the proper functioning of the brain activity. This is especially true for the memory functions of the brain. That is why it is very important that the air in the studying room is saturated with oxygen. Therefore, air often the room, in which you have your classes.

4. Factors perceived by touch

4.1. Temperature

Air temperature is a leading factor in determining the heat state of a person indoor. Heating, ventilation and air-conditioning systems are designed to maintain a constant temperature and sense of comfort indoor, favoring the vital functions of the human beings and their working abilities, regardless of changes in outdoor temperatures during the year. The main factors characterizing the air as healthy are temperature and humidity, as well as speed of air ventilation in the room.

The following air temperature is considered to be comfortable indoor:

- during winter period - 20-22 ° C,
- during summer period - 22-24 ° C

Temperature of 21 ° C is considered the most suitable for the premises during the day. Scientists have found that the healthiest room temperature at night is 18-19 ° C, in order to have healthy sleep.

Remember an important rule: if you reduce the room temperature by 1 ° C, it reduces your heating costs by 6%.

By one and the same temperature, but with different humidity, the perception of „room“ temperature is different. The optimal ratio is 18-22 ° C and 30-60% relative humidity.

4.2. Humidity

Harmful for the health are both low and high humidity. Most people feel good when the air around is dry and cool. Wet walls, for example, have low temperature and enhance the process of heat transfer of the body.

High humidity

Signs: feeling of coolness in damp rooms and the air has a heavy smell. In the corners there are wet spots, and afterwards molds.

How to reduce moisture: air and ventilate the room often and pull the curtains to get as much sunlight as possible.



Low humidity

Dry air is typical for new buildings that are heated around the clock and are rarely aired.

Signs: Our own body begins losing moisture - the mucous membranes dry first. Dry secretions are formed in the nose, the lips crack, throat scraps, eyes are irritated, and voice is often hoarse. At low air humidity, it is more difficult for the blood to be saturated with oxygen, and it is even possible to feel the typical symptoms of oxygen starvation - drowsiness, memory disturbances and decreased mental activity. Because of the dry air, indoor could be accumulated more static electricity and dust, which are heavily tolerated by people with allergies, bronchial asthma and by young children.

How to boost humidity: the most economical and safe method is to clean the room with water, to put damp cloths on the radiators, and to locate pots full with water around them. Planting the room is another way to permanently and aesthetically overcome the dry air. A little more expensive but not very demanding way is to use air humidifiers - they allow the maintenance of constant humidity in the room and are often combined with air ionizer.

Of great importance for the healthy microclimate indoor is **the ionic composition of the air** – that means that the ratio of positive and negative ions should be observed. **Negative ions** have good effects on people's self-confidence, so **they have to go beyond the positive ones**. They normalize blood pressure and affect people with cardiovascular and respiratory diseases. **They are important when mental and physical exercises are increased.**

If the positive ions predominate in the air, one feels „oxygen deficiency“, feels fatigue and has headaches. TV and computer screens, air conditioners, and even ordinary life processes increase the concentration of positive ions. Their optimal level is 600 ions / cm³. The pure atmospheric air contains about 1,000 negative ions and 1,200 positive ions per cubic centimeter of air.

Very important is the constant flow of fresh air. Air three or four times a day for a short time, but thoroughly. Four minutes are enough to get the right amount of fresh air.

4.3. Materials

The main purpose of interior design is to enhance the quality of life. The quality of live in a certain space is result of the full use of the available, efficient living space, of ergonomic furniture and quality materials, of the right combination of colors and accessories. Interior solutions depend on the purpose for the space. The goal of designing a learning environment is to design it in the most convenient, functional and impacting way for the learners. It is more than efficient to choose natural materials, close to the nature – as wood, for example.



1.3. Furniture

The furniture in a training room used for education based on the suggestopedic methodology should be different from what we are used to experience in a standard training room. It should be comfortable, soft, predisposing for relaxing experience. The design of the furniture for such an environment should be inspired by the nature. Thus, subconsciously, participants will feel that everything that is forthcoming is natural.

Softness and comfort are extremely important, but furniture has to be ergonomic, as well. Ergonomics is a complex science that studies humans and their working abilities by exploring the technical aspects of the relationship between humans and their working. Ergonomics is the theoretical basis of the organization of work. With the help of this science, a working environment that not only helps the learning process, but also the health of the participants can be created. Undoubtedly, good health leads to positive emotions, and in turn to positive results.

As a conclusion to the study of the learning environment, we would like to add that proximity to nature would be a very good practice. Choose your classrooms with a favorable exposure and view directly to the nature. And why not taking a bolder step - opening classrooms in the nature or lessons in a real urban environment. It has been proofed that direct contact to the nature reflects stimulating to the human ability to memorize, as it does not create a sense of duty. For example, a lecture held in the park has a much greater effect than a lecture held in a standard training room

This topic has the intention to provide you with enough detailed information about the learning environmental factors affecting the cognitive process and to provoke a real creative process for designing and organizing your own learning room. That is why we have abstained from concrete proposals related to the application of the presented knowledge.

GAMES AND TASKS

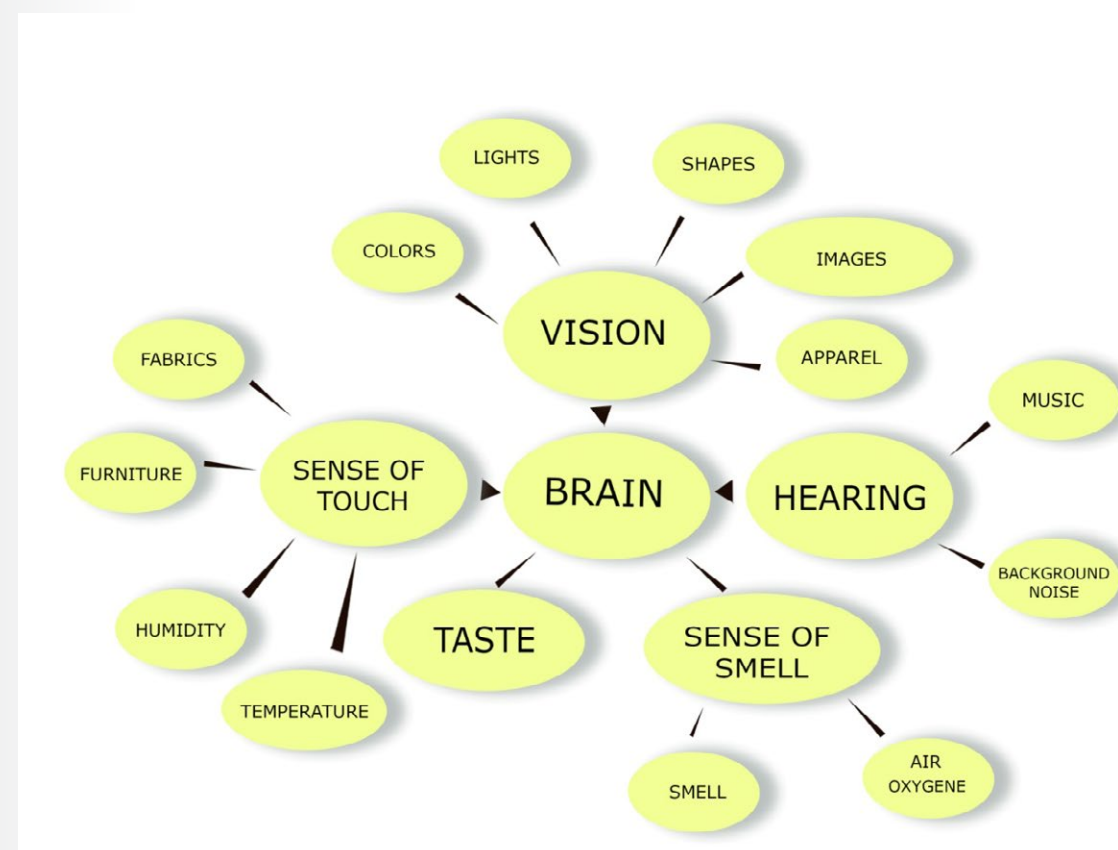
- How is influencing red color to a person?
- What is the influence of light from low-temperature sources on the perception of shapes and colors in the classroom?
- If you need to prioritize all of the listed factors, where in the scale you would put the music? Can a particular type of music have a degrading influence on any person?

PRESENTATION OF THE LEARNING OUTCOMES

- Make an improvised project about choosing the right interior design of a learning room, taking into account as many of the factors influencing the cognitive process.



MIND MAP AND MAIN TERMS



GOOD PRACTICES

This is a picture of our first experience in classroom furnishing back in 2013, when we first applied the suggestopedic system of teaching to develop and teach school content in order to reintegrate abandoned adult Roma citizens into the education system.

PRACTICAL APPLICATION

It is extremely important for the teacher to pay attention to the learning environment as it can influence the subconscious level and can either favor or obstruct the cognitive process. On the web there are many suggestions for creative solutions from waste, recycled or unused materials that can significantly lower the cost of the interior solutions.

The teacher should never reconcile with the provided learning environment. He must have the inspiration and the creative scope to change it if it does not correspond to the psycho-physiological processes of the people involved. It is necessary to adapt it to the needs of its students and to facilitate through it a faster and more effective learning process, accompanied by a pleasant atmosphere and real joy.



Upgrading theories



SOPHROLOGY

"We underestimate our brain and our intelligence ...

We all have the opportunity for enormous and unexpected academic achievements without effort. "

Frank Smith, "Intelligence Insult"

In the 1960s, Colombian physician Alfonso Kaysedo, while working in Barcelona, developed a kind of "rediscovered hypnosis" under the name "sophrology" - the word comes from Greek and means "rest"; its purpose is to provide therapeutic alternatives to psychotic patients other than electroshock and insulin coma (psychopharmacology has been in an experimental phase). He founded "Sophrology" as a school, learning the consciousness of both a healthy and a diseased human being.

This method is developed by Professor Alfonso Kaysedo, who in 1970 submitted it to the "First International Conference on Sophrology" as an attempt to scientific study of human consciousness - both as a philosophy and way of life, as well as therapy and equipment for personal development. Prof. Kaysedo is a neuropsychologist who teaches medicine after the Civil War in Spain seeking to effectively help the traumatized victims of the war by bringing them into a healthy physical and mental state with minimal use of medication. Sophrology is the name the professor gave to the method he created in 1960. The professor borrows and practices from the East, studying Yoga, Zen and Buddhism, looking for basic practices and exercises that can quickly and efficiently produce positive results.



OBJECTIVES OF THE TOPIC

After you get familiar with the topic, you will be able:

- To describe the meaning of the Sophrology.
- To distinguish the essential elements of the Sophrology.
- To analyze the Sophrology according to other theories and to discuss their special characteristics.

VERIFICATION OF THE UNDERSTANDING

In a group or by yourself, discuss and record the answers to the following questions and tasks:

- Discuss how, in your opinion, do you understand the essence of the concept of sophrology? Discuss and visualize your work.

The word sophrology comes from Greek:

So = harmony

Phren = consciousness

Logos = science, study

Sophrology is a science for the study of the consciousness and the values of existence.

- How will you explain what are the main contents of the Sophrology according to its name and could you make a brief description?
- Describe what do you think you use from the Sophrology in your work without calling it that way.

CONTENT INTRODUCTION

Sophrology is a structured method designed to achieve a harmonious consciousness, a philosophy of mental and mental health built up of practical physical and mental exercises aimed at putting the mind in a focused state.

Sophrology is a structured method designed to achieve optimal health and well-being. It consists of a series of easy to perform physical and mental exercises that, when practiced regularly, lead to improved physical and mental health, a calm body and a waking mind.

The ultimate goal of this method is to make practitioners fully present, absolutely vital and fully involved in all walks of life, feeling comfortable and cheerful.



Sophrology has a whole range of tools that are used daily to control stress and handle challenging situations. In a sense, it's like learning to manage your body: instead of letting sickness or stress manage your life, you train your mind to be better equipped to be healthy and to listen to the body when it alerts you as a sign of discomfort and react immediately.

The structured sophrological program we use today has developed on the basis of research and practical experience. Over the years, many varieties of schools, centers and schools using the Sophrology method have been created in the French-speaking world, not only contributing to the development of the method, but also adding expertise and expanding application areas. Sophomists are currently working in various international organizations and companies to reduce stress and optimize their health and wellbeing. Sophrology is used in many Swiss hospitals to prepare patients for surgical interventions and is covered by Swiss Health Insurance. Sophrology is officially recognized in the United Kingdom and has been recommended and used for many years.

The complete program has 12 levels. They are designed so that for a certain period of time we can find, master and transform our consciousness. Every level has its own goals and tools so that we can easily and safely reach the sense of self-consciousness and use our internal resources.

First level / first grade

The first step helps to raise body awareness, relieve deep tensions and promote awareness of the present. The first level helps people become more confident, focused and grounded, as well as supporting a wide range of stress-related symptoms.

Second level / second grade

The second degree explores the mind and the endless possibilities we have, such as imagination, concentration, creativity and silence, thus creating a better present and preparing for a positive future. Level two is known to improve concentration and focus.

Third level / third grade

The third level promotes deeper unification of the body and mind, freeing us from restrictive thought patterns and beliefs. It helps us to turn the past into a reward rather than a weight, and to enjoy the present even more.

Level Four / Fourth grade

The fourth level helps us to live by our own values and to find out which values are most important to us. Sophrology teaches us to look at ourselves and the world around us with less biased ideas that allow more freedom. This may seem



rather complicated for beginners, but since Sophrology is based on a practice involving body and mind, it becomes a living experience, not a theoretical concept.

Fifth level and higher levels

Those who are interested in more advanced practices will receive tools for a deeper study of consciousness. The union between the body, the mind and the soul can be further strengthened through exercises exploring the impact of healthy, cellular memory and basic human resources. These practices teach us to be our own alchemists, enabling us to apply them to our lives and relationships.

The technique is based on relaxation, breathing and visualization. Unlike meditation, you can engage your body with breathing. This will allow you to connect with yourself deeper, reach dynamic relaxation states and work on yourself with great efficiency. Sophrology is practiced in individual or group sessions. Sophrology can be used therapeutically or as a practice to contribute to the harmony between the mind and the body.

Exercises are called dynamic relaxation (relaxation on the move). The ultimate goal is to become fully present, totally alive and complete, comfortable and joyful in all areas of life.

The first things people usually notice after starting to practice sophrology are: more relaxed sleep, improved concentration, less worries, increased self-esteem and a sense of inner happiness. The most frequent note after several months of training is as follows:

"Overall, nothing has changed in my life, but I'm happier, things look easier, I have more energy and I wake up and I'm glad I'm alive."

How and where can it be applied?

You can practice software in individual or group sessions. Sophrology can be used therapeutically or as a regular practice to bring harmony to mind and body.

Sophrology is used to manage stress levels, improve sleep quality, increase concentration, reduce anxiety, affect self-esteem.

The technique is based on relaxation, breathing and visualization. Unlike meditation, Sophrology can also be practiced in an upright position of the body, and by breathing the practitioner can see how the body works and begins to feel it. This technique allows you to connect deeper with your inner self, achieve dynamic relaxation states, and work on yourself with great efficiency.



Sophrology can reduce:

- Stress and anxiety
- Anger and disappointment
- Anxiety and fear
- Sadness and guilt
- Disease risks

Sophrology can improve:

- Self-confidence
- Focus and concentration
- Sleep and relaxation
- The inner feeling of happiness
- Health and well-being

Students and pupils

Sophrology is taught in many schools, colleges, and universities. Usually, students practicing Sophrology exercises smile more, are more relaxed and have more self-confidence. Sophrological exercises act on the mind soothingly and help focus, which leads to concentrated and successful actions. Through exercises the students are completely present, past results or fears for the future no longer exist, and they are here and now. Regular exercises are important for achieving sustainable results.

GAMES AND TASKS

Here are some exercises that you can use in your practice as lecturers to get high concentration on the part of learners present and here.

Stand in front of the chair, place your knees in the shoulder width and start turning your head from left to right as if you say "NO".

Task 1

To release the tension from the mind / body:

Stand in a comfortable standing position and close your eyes and turn your



attention to the body. Do you feel physical tension? Your mind is so busy that you just can not concentrate?

With an effort to release any tension in the body or mind you are currently experiencing, lift both hands just above the head.

Inhale deeply, blowing your belly first, then your chest and holding your breath. While holding your breath, physically stretch every part of your body, including your face and toes for 3 seconds.

Release tension as you exhale and lower your arms back to your body. While exhaling, try to be fully aware of the tension that is being released from your whole body and let it go.

Do it three times, without hurry, taking the time to explore the feeling of relaxation that this exercise offers.

Task 2

To calm your mind and focus:

1. Breathe in as much as 3 or even 4 (or more if you have more lung capacity) Exhale at 5 or 6 (or more). To increase your sense of breathing performance and concentrate, you can put a hand on the lower abdomen. As you inhale, your stomach should be lifted as you breathe - your stomach shrinks. Invest 3 to 4 minutes in this exercise and feel the benefits.

Task 3

Humming: Breathe in and while you exhale gently hum. Make sure that the time at which you inhale (exhale) is longer than your inhalation time. Notice how the sounds make the different parts of your body vibrate. Do it for as long as you need to feel the benefits. Masturbation soothes the mind and makes you conform to your body.

PRESENTATION OF THE LEARNING OUTCOMES

Describe your idea of the application of Sophrology in your own pedagogical practice. Discuss in groups. Give good examples.



GOOD PRACTICES

How to practice sophrology?

To get more benefits, we recommend that you read these instructions carefully before starting the urological exercises given below.

Prerequisites:

1. Find a quiet place for exercises
2. Be sure you are in a place where you can sit, stand straight or lie down, and it is safe to close your eyes.
3. Turn off your phone to avoid being disturbed.
4. Recall the four sophisticated attitudes:

➤ Free yourself from condemnation

As human beings, we automatically condemn people, places and situations. It is not possible to be free from condemnation. Yet, if we realize that we are condemning, we can leave our condemnation and see other ways of experiencing and perceiving the situation, person or object.

➤ It seems to be your first time

Do the exercises as if you were doing them for the first time. When we look at the world as if looking through the eyes of a child, instead of looking, based on past experiences, we look at situations, people and objects as if for the first time, filled with curiosity and wonder. Be curious and be astonished by the physical sensations in you that you experience through your senses.

➤ Place in brackets

Putting in parentheses means leaving your anxiety, worries and worries as well as all your prejudices to live as if it is new every moment and waiting to be discovered the way it is. It is not a good or bad moment, it's simple.

➤ Body repetition

The human brain and body are programmed by repetition. If we want to learn something, we need to repeat it regularly until our body and nerve paths start automatically functioning according to the training. Sophrology is like learning a sport. It is important to repeat the exercises regularly,



while the benefits and the way of functioning are integrated into everyday life. Body repetition is a repetitive action that draws full attention to everything we experience through our senses.

Another way you could understand the four sophisticated attitudes is to imagine the following:

You are a supreme scholar sent from another planet. You are here to explore what it's like to be in a human body on Planet Earth. You have been asked to investigate this in detail and report.

Every exercise you are doing is a scientific experiment in which you observe all the physical sensations you experience through your five senses. This is the first time you've ever been in a body that you do not know or know about body parts, how they function or what they serve.

When repeating the exercises, do it as if it were the first time. Every physical sensation you see through your five senses is welcome and noticed. As a scientist you are full of curiosity and astonishment for this completely new experience that you are in the body and you are on the planet Earth.

At the end of each exercise, write down all the physical sensations you can remember. This notebook is your research diary and will be completed after each exercise.

5. When done, turn on your MP3 player or PC and start exercises.

6. When done, note all the physical sensations you have observed in your research journal.

PRACTICAL APPLICATION

You can visit and use the following resources:

Sophrology Center Online

Founded by Dorna Revie - creator of Sophro-Ki® Sophrology Method

<http://www.sophrologycenteronline.com>

International Sophrology Federation

www.sophrologyinternational.org

Accredited Sophrology and Reiki School

www.EnergyCentre.ch



PLAYING CLIL

„PlayingCLIL is a truly welcome addition to CLIL practices with creativity at its core. Exploring language and thinking through stories, games, humour and drama provides learners with opportunities to actively co-construct meaning and to 'language' their thinking in creative ways."

Do Coyle Professor in Learning Innovation

Head of School of Education University of Aberdeen

OBJECTIVES OF THE TOPIC

After you get familiar with the topic you will be able:

- To Offer to teachers a new methodology with tools and materials
- To bring inspiring games and challenges into the classroom
- To allowing students to learn in a more enjoyable context
- To enable students to take ownership of their learning
- To promoting interaction and collaboration in the classroom
- To develop self-confidence and presentation skills to the learners
- To generate energy, enthusiasm and motivation
- To motivate students by engaging all their senses in energetic learning activities
- To developing emotional maturity and skills
- To cope with both success and failure
- To encourage students to act, interact, cooperate and compete

VERIFICATION OF THE UNDERSTANDING

In a group or by yourself, discuss and record the answers to the following questions and tasks:

- Did you hear about CLIL and Playing CLIL? Please, explain in details your knowledge about.
- Please, list the specific characteristics of this method of learning, if you are aware.
- What are your expectations about the method?



- What are your overall expectations about any method implementing as its core pedagogic value the act of play?

CONTENT INTRODUCTION

Suggestopedic teaching system is the basis on which we built „NEWave in learning“ - a methodology for quick and effective learning. But „NEWave in learning“, apart from suggestopedia, is also inspired by PlayingCLIL, whose methodology is content and language integrated learning Inspired by drama pedagogy. This section covers everything that is most important to know about PlayingCLIL. The section consists of the following chapters:

Chapter I – What is CLIL? What is Playing CLIL?

Chapter II - Learning is an active process of making sense

Chapter III - The 4Cs framework and the language of/for/through learning

Chapter IV - BICS / CALP and the CLIL-matrix

Chapter V – Drama techniques and games

Chapter I

What is CLIL? What is Playing CLIL?

As **CLIL (Content and Language Integrated Learning)** continues to develop into a holistic approach to deep learning, its potential for providing motivating and creative contexts in which all learners can succeed continues to unfold. Increasingly rigorous and extensive empirical research and classroom-based studies confirm that there is no one model for CLIL – after all, successful learning has to take account of the **contextual variables** which impact on different school and community settings. This means that at times some of the activities might be more **language-oriented** than **subject-oriented** and vice versa in order to support learners become confident language users. However, there are also some challenging core **CLIL principles** which have to be shared across all contexts if learners are to progress and gain at a deeper **cognitive** and **intercultural level**. These principles focus on language as a **learning tool** as well as **communication tool**. Engaging all learners in creative, problem-solving higher-order thinking is essential. However, learner engagement demands that they are equipped with the kind of language needed to interact with peers and others creatively, construct meaning and to share ideas in ways. which are relevant and motivating. Language, therefore, has to enable all learners to



construct meaning which requires guided scaffolding in terms of **conceptual exploration** and **understanding** across people and cultures. PlayingCLIL is a truly welcome addition to CLIL practices with creativity at its core. Exploring language and thinking through stories, games, humour and drama provides learners with opportunities to actively co-construct meaning and to 'language' their thinking in creative ways. We use a games-based principled approach to CLIL. It is full of practical, adaptable ideas to support teachers in providing language-rich, cognitively challenging, interactive and creative experiences for their learners. **Games-based learning** has a significant contribution to make to CLIL by not only enabling learners and teachers to enjoy learning but also to actively explore and create their own successful plurilingual and pluricultural experiences.

The **carefully structured curriculum** delivered by teachers who understand how the brain builds schemas through emotional, as well cognitive engagement provides a powerful psychological experience that learners remember forever. The scaffolding for learning not only occurs between the teacher and each individual but between the learners themselves multiplying the impact of learning by a factor of 30 (size of group). Foreword The **Educational Psychology** underpinning Interacting combines **Vygotsky's theory of learning, Maslow's understanding of motivation** and **Bruner's approach to cognitive development**. By involving the whole person within a community of learners a new, and often profound, view of learning through life experiences emerges and gives them a new vision of teaching through interaction that generates play, fun and **life-long love of learning**. Inspiring children to be brilliant learners contributes to a future society that would all want to live in.

The term 'Content-and-Language-Integrated-Learning (CLIL)' generally refers to educational settings where **a non-linguistic subject** is taught through **a foreign or second language**. Within Europe, CLIL has a long tradition, and it has been incorporated into mainstream education in most countries. However, this does not mean that it is widespread everywhere or accessible for all learners across all ages and educational contexts alike (Eurydice 2006). The playingCLIL method is the outcome of a two-year project collaboration between experts in learning through play, CLIL practitioners and researchers, and educators from various contexts of schooling. PlayingCLIL aims to bring **innovation** and **creativity** to the CLIL classroom and beyond. It combines elements of drama pedagogy and drama techniques with language and content matter learning in an innovative way that emphasises and builds the learners' abilities and confidence to interact. PlayingCLIL takes its inspiration from **improv theatre**. However, even though many of the games had originally been designed for the stage, playingCLIL



games are rather intended for classroom settings. PlayingCLIL can be used in all subjects and with learners of any ages. The games, which are the core of playingCLIL, were created to be readily adaptable to the specific requirements of various CLIL subjects across the educational contexts and across different levels of learners – from primary to secondary, from vocational to adult education.

As its name suggests, playingCLIL is the result of a fusion: It has been conceived to **combine the pedagogical value of play** –and more specifically that of **drama games**– with the CLIL methodology and tie them up in an innovative and highly engaging set of resources. The games have been tested for several months in schools around Europe and in the process they have been transformed and improved, thanks to the insightful contributions of teachers and students alike. This is to say that the suggested activities should be viewed as prototypes, as springboards that will propel you into ever more creative and effective ways of teaching language and content through drama. By the same token, we encourage professionals from other teaching contexts outside CLIL to adapt and try out the games, as we feel that the ideas behind them are versatile enough to meet the needs of virtually any learning environment. If our expectations are anything to go by, this collection of resources will lead you into an ever more meaningful and enjoyable teaching experience.

Chapter II

Learning is an active process of making sense

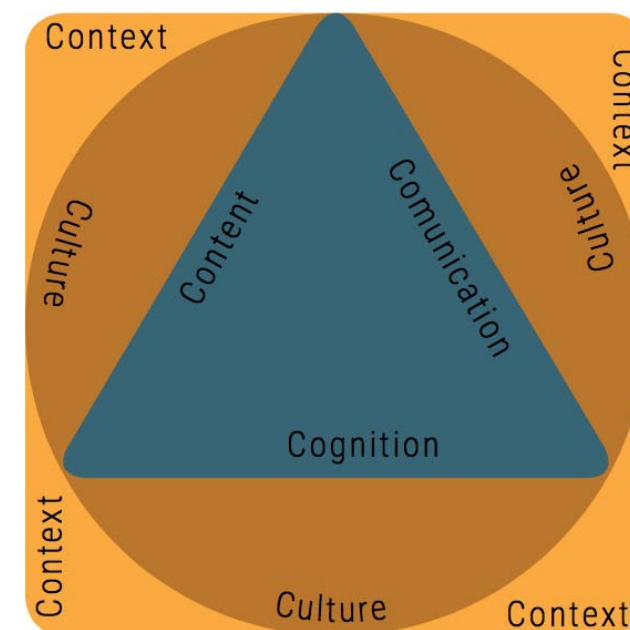
The starting point of playingCLIL is to see learning as an active mental process of making sense of the world. Learning is active in the sense that children (and humans in general) learn for themselves. Learning cannot be done by another person (say, by a teacher). Learning is a process, which means that it is constantly evolving and openended. We cannot predict what people learn precisely. We cannot assume that learning ends at a certain point either. People learn for as long as they live, and they also continue to learn for as often as they re-visit a topic, or apply a skill they once acquired. Learning is equivalent to making sense. Ultimately, learning aims for understanding, for giving meaning to experience. There are infinitely numerous ways of experiencing the world and giving meaning to it (e.g. from various perspectives or affective states).



Chapter III

The 4Cs framework and the language of/for/through learning

Coyle et al. (2010) refer to this framework of CLIL:



The 4 Cs Framework by Coyle et al. (2010, p.41)

Content: subject matter; progression in new knowledge, skills and understanding.

Cognition: learning and thinking processes; engagement in higher-order thinking and understanding, problem solving, and accepting challenges and reflecting on them.

Culture: developing intercultural understanding and global citizenship; 'self' and 'other' awareness, identity, citizenship, and progression towards multicultural understanding.

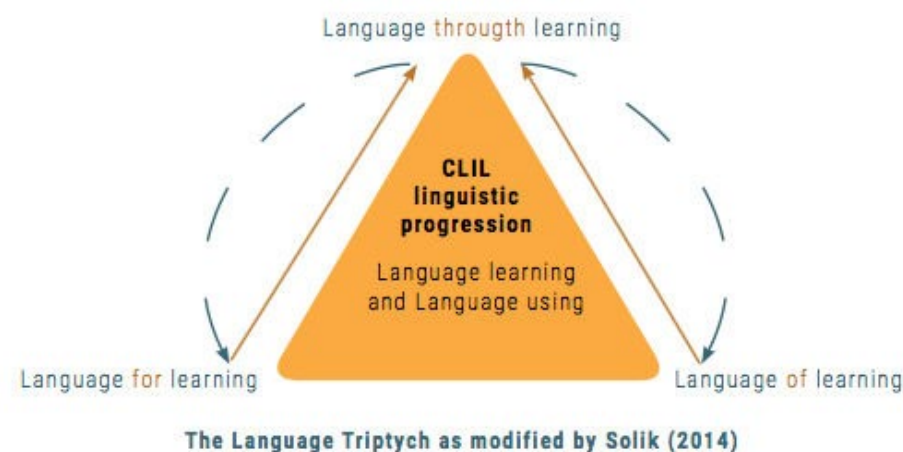
Communication: language learning and using; interaction, progression in language using and learning.

These four elements occur, as we can see, in a specific context which includes them all and which determines them. These four elements are tightly intertwined. For instance, learning the content has a positive influence on communication,



as it contributes to language development. However, this influence can also be negative if, for example, the content is both difficult and unfamiliar to the learners. Likewise, content and cognition are closely linked, since, as Coyle et al. (2010) state, "for content learning to be effective learning, students must be cognitively engaged" (p.29)

The term communication in this framework can be interchangeable for language. The learning process of both content and language in CLIL is (or should be) parallel. Regarding CLIL, we can distinguish three different types of language which come into play when we develop a CLIL lesson.



Language of learning: It is the type of language that learners have to acquire in order to be able to access the new knowledge that is going to be introduced through the specific content of the subject. It is language specific to the subject, so it can be related to the genre. For instance, in a CLIL lesson of History whose genre can be identified as period study, this language would include terms and vocabulary related to houses, clothes, customs, etc., together with descriptions and generalizations and the use of, for example, the past tense.

Language for learning: It is the language that learners will need to use during the lessons, so that they can develop and do the tasks and activities efficiently. It is related to the classroom language. This type of language would include a vast number of examples, although the level of the foreign language of the group should always be taken into account in order to establish the difficulties students may find to use some structures. For example, if the use of the past tense is part of the language of learning in the lesson, we cannot expect them to make a valid and extensive use of this linguistic feature in their language for learning.



Language through learning: It is the kind of language that cannot be planned in advance and which will 'emerge' through the learning process. This type of language could probably be related to what Mohan and van Naerssen (1997) refer to when they say that "as we acquire new areas of knowledge, we acquire new areas of language and meaning" (cited in Coyle et al., 2010, p. 34)

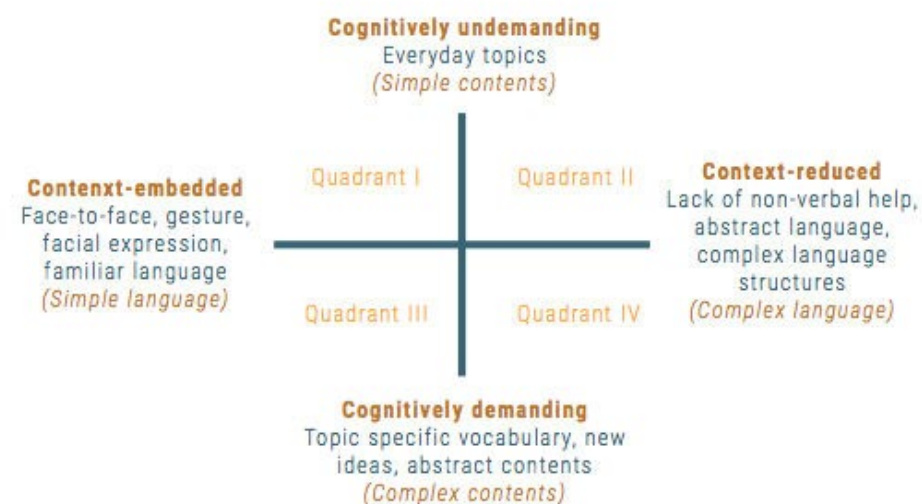
Chapter IV

BICS / CALP and the CLIL-matrix

Regarding the proficiency of the language used, Cummins (1979) makes the distinction between two different kinds:

1. **BICS** (Basic Interpersonal Communicative Skills): It is related to everyday language and is not cognitively demanding.
2. **CALP** (Cognitive Academic Language Proficiency): It takes place in an academic setting and it refers to the language as a tool for learning.

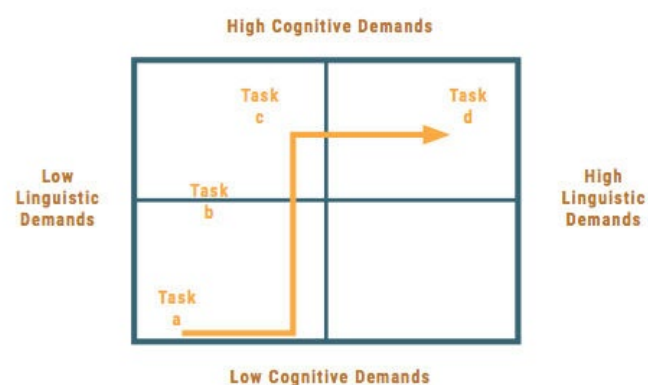
While traditional language teaching is mainly the domain of BICS, this is different in CLIL, where CALP becomes more relevant. CALP refers to a set of "knowledge structures" or "macro functions" that can be subdivided into the three dimensions: '**descriptive-classificatory**', '**explanatory**', and '**evaluative**'. These dimensions differ in their cognitive complexity and the level of abstraction involved and can be sequenced "from lower to higher order thinking skills: recall, understand, apply, analyse, synthesise and evaluate". In CLIL, it is particularly important for teachers to realise that learners need to acquire the foreign or second language not only at the BICS-level, but necessarily also at the CALP-level. Based on the distinction between BICS and CALP, Cummins (1984) created the following matrix and he placed BICS in quadrants I and II and CALP in quadrants III and IV:



The CLIL-Matrix adapted from Coyle (2010, p.43)

Coyle **adapted Cummins' matrix** to CLIL. In this adaptation, Coyle et al. (2010) present the different frames in which both cognition and language coincide, depending on how demanding each of them is. The relationship between these two variables is fundamental in the CLIL context, since "if the language level is too demanding, then arguably effective learning cannot take place. If the cognitive is too low taking into the account the language level, then learning is restricted" (p.43). The following figure also shows how, in the matrix, tasks can be designed to follow a trace from low to high cognitive and linguistic demands.

Planning the tasks this way (auditing tasks), a teacher can monitor, sequence and scaffold the learning process (Coyle et al., 2010, p.67)

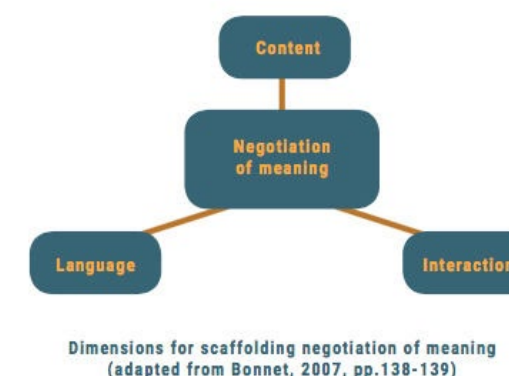


Auditing tasks (Coyle et al., 2010, p.68)



This **task of balancing cognitive and linguistic demands** is not easy, since the relationship between both cannot be balanced. Coyle et al. (2010) refer to this when they claim that "in the CLIL classroom it is unlikely that the language level of the learners will be the same as their cognitive level" (p.43). This fact would make CLIL teachers have to face a challenge which implies balancing both elements, so that the learning process of both content and language can be successful.

This **CLIL matrix** can be a very useful tool in this process of balancing both types of demands. If the language level of learners is not high enough, the focus should be placed on quadrant 2 and, as it improves, we move to quadrant 3. Regarding cognitive demands, for learning to take place we should ensure that learners will be cognitively challenged. In this process of challenging learners cognitively and linguistically, we will make use of scaffolds which will support such a process.



Dimensions for scaffolding negotiation of meaning (adapted from Bonnet, 2007, pp.138-139)

Bonnet's model complements the 'C for communication' in the 4Cs model and the 'language for learning' angle within the Language Triptych, the two models by Coyle we discussed above. While Coyle conceptualises learners' communicative competence in terms of language growth, Bonnet's model gives importance to learners' social and metacognitive competences. The notion of interactional competence highlights what is often hidden from the immediate view of teachers when planning a CLIL curriculum and individual tasks for lessons or projects. What the idea of interactional competence helps to notice is **that if learners are to be truly involved in the learning process, they will have to be able – and to be allowed – to respond to a topic from their own point of view. They will also have to be able to engage with others in a constructive way** (Bonnet, 2007, p.134).



Chapter V

Drama techniques and games

It is no accident that in many languages the word play crosses from the theatre and stage to the world of games, fantasy and make-believe. In this chapter, we explore the context of theatre and drama in the playingCLIL project.

The special and interdependent relationship between playing and learning is described and the benefits of learning through play are outlined. We begin by advancing the idea that theatre and play are inextricably linked and a constant feature of human existence, as vital as our need for food and shelter.

The nature of the way we learn through play and the importance for classroom practice is a well documented and persistently controversial subject in education. The type of team responsibility, relationships and risk inherent in games are seen as both an answer to the need for creativity in teaching for the future and a means of preparing learners for the 'real world'.

Bringing theatre games to CLIL contexts has brought some exciting and, we believe, unique new facets to the games themselves. These games we have named 'signature games'.

The playingCLIL project assumes the commonly held view that the essence of drama is conflict. The coming together of different elements, be they characters, philosophies or political agendas, be they open or hidden motivators, connects drama with the soul of creativity. Combining elements in conflict generates dialogue and action and changes a place into a context. Our theatrical frameworks are comedy, improvisation and participation.

In improvised theatre, conflict takes place as different people are placed together in determined places. Their meeting is the source of drama. The choices will decide the behaviour of the players as they act to understand and resolve the conflict. As a drill for teaching these skills we will call out to players to find the problem and make it worse before looking for a way out or solve the problem.

Our theatrical instinct is an expression of our imaginative and creative process. It is intrinsically linked with our will to survive and attempts to evolve. It connects us with the way we understand our past and how we try to shape our future.

Formal education seems to reflect this traditional conception of play. In schools, games are usually restricted to recess and to sessions of extracurricular activities.



Students are allowed time to play in order to relax and blow off steam in-between classes, which is where the 'real learning' is supposed to take place. One practice that is fairly common among teachers is the occasional use of games towards the end of a lesson, with the purpose of helping students to unwind after a highly informative and often tedious class, or even as a reward for their satisfactory performance in the more 'serious' lesson tasks.

But is this really the only connection between playing and learning? Do we play so we can clear our strained minds before we expose them once again to the laborious task of acquiring more knowledge? Trying to answer this question, we will first have a quick look at Piaget's (1967, 1969) attempt to decipher the cognitive mechanism of early learning and then turn to Weisler and McCall's (1976) insights into the nature of human play.

As children interact with the world, they observe, explore and imitate. These actions correspond to the cognitive processes that Piaget identifies in his constructivist account of human development as 'assimilation' and 'accommodation'. By observing and exploring, children assimilate external experience and gradually fit it into the structures of their internal world. Through imitation, they accommodate their own thinking and behaviour to the newly discovered external reality. These two ongoing complementary processes set the pace for cognitive development and form the mechanism that we call learning.

As children interact with the world, they observe, explore and imitate. These actions correspond to the cognitive processes that Piaget identifies in his constructivist account of human development as 'assimilation' and 'accommodation'. By observing and exploring, children assimilate external experience and gradually fit it into the structures of their internal world. Through imitation, they accommodate their own thinking and behaviour to the newly discovered external reality. These two ongoing complementary processes set the pace for cognitive development and form the mechanism that we call learning.

Especially in the form of simulation (as is the case of the drama games presented in this book), play requires participants to momentarily accentuate their natural inclination towards observing, exploring and imitating. Each game creates an imaginary situation that is outlined by specific rules and parameters. Players are called to assimilate them into their structured reality and then accommodate their actions to the new roles they are expected to perform in order to reach the collective goal. The fundamental mechanisms of learning, namely, assimilation and accommodation, are thus put into action and keep working as long as fresh stimuli are fed into the players' perception.

Lectures, reading, writing, graphic materials and audiovisual aids, experiments



and tests are all widely accepted as parts of our school routine. But what if games also came in as a rightful and equal partner in the learning process?

GAMES AND TASKS

Define your space

As well as ensuring that the playing environment is safe for creative flight the needs of physical space should be addressed. Ensure that you have enough room for the movement needed. Safety is always a factor, as players appear willing to risk their lives to be in and not out, even in the most benign musical chairs type of game. Many warm-ups and icebreakers have physical contact and often involve running and changing seats. Please choose an adequate space for the physical movement involved in your games. Consider how chairs are placed and organise your furniture accordingly.

Introduce your activity

Viola Spolin (2000) speaks about the point of concentration as the essence of any particular game. She claims that when players know what is expected of them and what the successful outcomes are, they play more effectively. It is not necessary at this stage to state what the learning intentions are. Introductions need to be brief and if the game is complex, instructions should be given in stages. Have clear control mechanisms, this may be use of a stopwatch or clear instructions and goals to signify how to end a round or an individual's turn in the game.

Model

When you model your activity in class, choose a player who you think will understand your instructions easily and therefore will be able to set the example that the game needs. Often, you will choose a cluster or a small circle within the class to illustrate. Showing is more effective than saying.

Play

Everyone should have the opportunity to play. Start with the basic version of the game and gradually introduce complexity. Allow adequate time for preparation if the game requires. If you are playing circle games, where players have to wait their turn, be sensitive to the waiting time and, where appropriate, generate smaller circles after modeling. Keep the rhythm of the games brisk, do not be afraid to move on if players lose their focus.



Review, refine, repeat and eliminate

Playing a game once introduces the players to a new set of rules. When they have the opportunity to play again, they will be more skillful. It is worthwhile to repeat a playingCLIL game many times with different language and content generating new learning experience for the players.

The foundation:

Signature Game: Alphabet islands

Foundation games follow conventions suggested by Johnstone (1999), Spolin (2000), Pierse (2006) and others in starting with creating a safe playground. Often bundled as warm-ups, icebreakers and trust exercises, most of these activities are designed to allow what comes after. Icebreakers can stand alone in their use as a way of introducing people for the first time or introducing people in ways unknown. For example a group of teachers may have worked together for years but never played together and are unaware of each other's funny, creative or competitive side. Icebreakers or warmups should be used at the beginning of any games-based learning experience to help the group relax and set the tone for the activities to come. Warm-ups have a different feel to icebreakers and are used to start the session when the group already know each other. Trust-building activities are used to instil individual confidence and group tolerance. In playingCLIL these games are often connected with the culture C out of Do Coyle's famous 4Cs. Many trust activities involve physical contact and may include vocal and verbal warm-ups. In a way, they are the equivalent of stretching. Sometimes teachers who are not aware of the need to create a safe learning environment are sceptical of the value and importance of these games. They want to get to the point of the subject and bypass the process. Please be patient.

Ground floor:

Signature Game: Threesomes

Ground floor games are for players who already know each other and are confident to express themselves verbally and physically. This is a stage of game we sometimes refer to as a training game and they lend themselves to introduction of concepts and terminology as they often have a repetitive element

Stairs:

Signature Game: Historical Freeze Frames

We build on the competence of collective creativity and move from mimes to their interpretation, connecting action to words and analysis. Central to games at this



stage is the concept of the suspension of disbelief. This is a theatrical convention and vital component in the relationship between a player and their public. It is an understanding where the audience know that what they are watching is not necessarily true but that they will behave as if they believe it is.

Upstairs

Signature Game: *Press Conference*

The Upstairs games bring improvised dialogue to our games. Individuals teams are challenged to perform and demonstrate knowledge on the matter of their scenes. High levels of listening skills and rapid speed of response are trained and required for successful games.

Rooftop:

Signature game: *No, you can't take me!*

These are games where the players are able to create and perform scenes and stories. They can invent appropriate dialogue, give status to characters and bring a sense of context and relevance to places and action presented. These games allow both individuals and groups to adapt the structure of the game to the content of the class. They are often highly entertaining and are excellent tools for evaluating subject content.

PRESENTATION OF THE LEARNING OUTCOMES

At the end of your training in PlayingCLIL, you will need to develop and present a key game and to apply it in an exemplary lesson of your choice. We wish you successful and inspired work during the training.

Incorporating learners into what they need to learn seems to be crucial to the teaching process. Learning can happen if learners are motivated. The main task of CLIL teachers is to enable learners to engage in a meaningful interaction of a foreign language on topics and problems placed in the curriculum of the particular discipline.

PRACTICAL APPLICATION

Once you have looked at the Playing CLIL method, indicate how you can apply it to your practice.



Interaction of Knowledge, Attitude and Behavior (IKAB)

"Families, friends, neighbors, or employees ... are aware that prejudices are a problem, [...], they often do it because of pressure from others."

Prochaska

OBJECTIVES OF THE TOPIC

After you get familiar with the topic, you will able:

- define the knowledge, attitude and behavior.
- To talk about interaction between knowledge, attitudes and behavior.
- To discuss about knowledge and attitudes as factors of behavioral coherence.
- To define the impact of knowledge on attitudes and behavior and the restrictions related to research on cognition and consistency of behavior.
- To explain the effects, the behavioral moderation and the complexity of knowledge.
- To talk about effects of Attitudes and Behavior.
- To discuss about different theories, which interfere between knowledge, attitudes and behavior like the theory of planned behavior and the Stages of, change (Trans-theoretical model).

VERIFICATION OF THE UNDERSTANDING

In a group or by yourself, discuss and record the answers to the following questions and tasks:

- Discuss what do you know about the knowledge, attitude and behavior and what could be the interaction between them.
- Think about how knowledge and attitudes can affect the behavioral coherence and what is the impact and restrictions related to research on cognition and consistency of behavior.



- Try to think about the different effects, which the knowledge could have. How do you understand the complexity of knowledge? What do you think the behavioral moderation is?
- Do you know any theories, which discuss the interference between knowledge, attitudes and behavior? If yes, which ones?

CONTENT INTRODUCTION

1. Knowledge

Bloom's taxonomy defines the following areas of learning: cognitive, emotional, and behavioral. The focal area of learning refers to knowledge and understanding. Knowledge usually includes three aspects:

- (1) Declarative –what we learn;
- (2) Procedural-how we study or perform a particular task;
- (3) Conditional - why and when we learn.

There is a significant set of studies, which show that knowledge provides more than simply acquiring new knowledge (e.g., Halford, 1993). Knowledge drives the individual's attention to discrimination or the focus on a particular element of the environment (e.g. Ericsson, Patel, & Kintsch, 2000, Marshall, 1995). It also allows people to draw conclusions and therefore to color the perceived significance of new information (Gagne Yekovich, & Yekovich, 1993; Marshall, 1995).

Despite that, knowledge has proven so elusive construct measurement; we are in the business of education. This means that increasing knowledge will always be a major source for us. Thus, choosing a large format and building its content should be a rigorous effort involving multiple interactions and pilot tests. If we cannot be sure that we measure what we are trying to measure, then we cannot maintain the effectiveness of our interventions (see Cangelosi(1990), Eb- el(1965) and Payne(1992)for reference).

2. Attitude

Like the knowledge, the concept of respect has multiple meanings for researchers. From a historical point of view, literature reveals two distinct frames in which attitudes are definitely behavioral and cognitive (see Ajzen & Fishbein, 1977, for review).



Allport(1967) and La Piere(1967) define attitudes and behavior as a *mental and nervous state of readiness(responsiveness)driven by incentives that guide the individual response to all the objects with which it is linked*. In contrast, Thurstone takes the view that "the relationships the influence on or against a psychological object" (1931, p. 261), not behavior as others suggest. Thurstone(1967) adds that attitudes are also subjective because they are regarded as an amount or a set of all feelings and dispositions of a particular concept, idea or action.

More psychologists that are modern further enhance understanding of the definition of the ratio (Ajzen,1993, Albert, Aschenbrenner,&Schmalhofer,1989; Eagly&Chaiken, 1993;Erwin, 2001;Gable&Wolf1993), and added three components: cognitive, emotional and conative.

The cognitive component is a faith or an idea associated with a particular psychological object. The emotional component presents the individual assessment of the psychological object as well as the emotion associated with that subject. The conative or behavioral component represents the apparent action or predisposition to a certain activity, directed to this object.

As a result, most evaluation and scaling techniques (see Gable& Wolf, 1993) lead to a result that defines the so-evaluative continuum of the individual. From a cognitive point of view, research uses this large-scale technique to assess the emotional dimension in Bloom taxonomies.

The attitude is a function of the situation that occurs. This can be very problematic for researchers in complex environments such as schools and business, as Gable and Wolf(1993)study.

Examples of assessing attitudes to research usually focus on some form of self-reporting data (Schrader, 2003).

3. Behavior

Most psychologists agree that *the behaviorists an action, which can be viewed*. Researchers use the composite definition: *the way a person, an organism or a group responds to a set of conditions*. Although this understanding is simple, the researchers have defined a number of operational evaluation techniques to record and measure behavior. Researchers have applied direct measurement techniques, such as recording the incidence of occurrence of a given behavior at a time, but have also used less direct methods, such as interviews with peers or close friends, to understand the dynamics of a participant's behavior. In addition, participants who do not directly engage in behavioral research



are made through a self-assessment port, such as a journal or poll.

4. Interaction between knowledge, attitudes and behavior

One of the reasons for integrating multiple types of methods for evaluating methodology is the vague relationship between knowledge and behavior (Valente, Paredes & Poll, 1998). Researchers discuss the direction of the relationships as well as the actual existence of interrelation (Ajzen, Timko, & White, 1982; Fazio, 1986; Fishbein, 1967).

More recent studies show that the relationship is significantly more complex, indicating that it is potentially reciprocal and dynamic (Alexander & Docsey, 1995; Aijen & Ribbein, 1977; Bruvold, 1990; Kim & Hunter, 1993; Kirby, 1985). From one perspective, this is what the individual knows and can do to determine his attitude to this subject, and how he feels about this subject can affect behavior.

Alternatively, as some have already noted, attitudes can also be reconciled with behaviors that do not suggest behavior can incite relationships (Fishbein, 1967), and attitudes influence attention (Hoffman, 1986). In this way, attitudes can influence what the individual perceives and consequently influence learning.

On the other hand, knowledge of it or respect, it is not necessarily so determined a behavior (Ajzen & Fishbein, 1977; Beavers, Kelley, Flenner, 1982).

Considering all these arguments, it can be concluded that the relationship between these three—knowledge, attitude and behavior—are dynamic and reciprocal. It is therefore useful and sensible to carry out research of this kind of perspective that these three dimensions interact.

5. Knowledge and attitudes as factors of behavioral coherence

From the studies the characteristics of attitudes Mr. Ed and the first to which it will be discussed and is the construction of knowledge related to attitudes (Converse, 1970; Rosenberg & Abelson, 1960).

Tied with respect knowledge attitudes (also called “knowledge-related questions or working knowledge”), generally defined as the number of convictions and experiences related to the treatment of mood (eg, Davidson, 1995; & Biek, 1995).

Usually knowledge is assessed by counting the number of convictions and experiences that people can remember in questions and tasks with open answer (eg, Davidson, Yantis, Norwood, & Montano, 1985; Kallgren & Wood, 1986; Wood, 1982).



6. Impact of knowledge on attitudes and behavior

One of the reasons the researchers have been interested in knowledge is that it has long been assumed that the increase in knowledge is associated with a greater influence of attitudes towards behavior. Several studies supported this assumption. For example, Kallgren and Wood (1986) assess environmental attitudes and measure attitudes-based knowledge using open-ended knowledge-recognition responses. They find that attitudes based on high levels of knowledge are more predictable for environmental behavior than attitudes based on low levels of knowledge. Similarly, Davidson et al. (1985) find that intentions are better predictors of behavior when they are based on knowledge than when they are based on less knowledge.

7. Restrictions related to research on cognition and consistency of behavior

Despite support for the notion that knowledge is related to the sequence of behavior, there are some limitations in the available research.

One of them is that in behavioral sequencing studies, it has always been measured and not experimentally manipulated. In this way, it is difficult to distinguish the effects of knowledge from other variables with which this construction is linked, such as behavioral security, extremeness and accessibility. Therefore, there is no conclusive evidence that knowledge itself has a causal impact on the sequence of behavior.

Another important constraint is that the mechanisms underlying the association of knowledge with the sequence of behavior-attitudes are poorly understood. To date, three explanations have been proposed. One explanation is that increased knowledge is likely to lead to more stable and change-proof attitudes. Thus, the assessment of attitude based on little knowledge can be a bad predictor of subsequent behavior, because behavior can no longer be the same. By contrast, attitudes with a high level of knowledge are more likely to be stable between the time of assessment and the time of behavior.

A second explanation for the impact of knowledge is that knowledge is related to accessibility of attitudes. Studies have found that increased availability ratio (i.e. the extent to which behavior it is activated spontaneously in meeting the object of perception) leads to greater influence on attitudes towards behavior. Given the positive association between knowledge and accessibility (eg, Krosnick et al., 1993), increased knowledge may be associated with increased sequence of behavior due to a higher probability of activation of attitude during



behavior.

Third, the knowledge of attitude is related to various subjective (metacognitive) beliefs related to the attitude of the attitude, such as security and perceived knowledge. As these beliefs are found to be particularly certain about the coherence of behavior, it is possible that these beliefs, not the actual knowledge of attitudes, are responsible for the past effects.

The current conceptualization of knowledge suggests that greater knowledge inevitably leads to improved sequence of behavior. These perspectives do not define the conditions for moderation in which one can expect to see a greater or lesser role of knowledge in the sequence of behavior and behavior.

8. Explaining the effects of knowledge

The current theories about the role of knowledge in the sequence of behavior and behavior are incomplete because of her psychological mechanisms previously not recognized in literature also contribute to the influence of knowledge on the sequence of behavior and behavior.

A long-established, but underestimated, discovery in the literature about attitudes is that even when a person has a well-developed attitude that is activated in behavior, this attitude may not always turn into behavior. One must also clearly understand that attitude is an appropriate guide to the behavior in question. Thus, when faced with behaviors related to the subject of behavior, one often has to consider how informative his attitude towards particular behavior is.

This process of assessing the relevance of attitudes to behavior is likely to be influenced by the content and structure of the knowledge underlying the attitude.

9. Behavioral Moderation of Knowledge

One property that can lead to the emergence of psychological and suggestive barriers is the extent to which the content of the knowledge upon which the attitude is based is directly related to the purpose of the behavior. Researchers have long recognized that attitudes can be based on individual information sizes. Some theorists distinguish the affective, cognitive and behavioral dimensions of information. Others have noted that attitudes have different functional bases such as utilitarian, expressive, and social regulatory bases.

Moreover, as attitudes can vary by the nature of their basic dimensions of knowledge and the purpose of a given behavior can vary in its direct relation to



the various dimensions of knowledge that underlie the way. When at least one dimension of the knowledge underlying the attitude is directly related to the purpose of behavior, and this magnitude of knowledge is evaluated in accordance with the overall attitude, one can judge that his attitude is a valid guide of behavior.

However, people are not always able or motivated to ponder. In these cases, people would not be able to judge how appropriate their attitudes were as behavioral guides, and thus could use their attitude, their relevance to behavioral goals. That is, the attitude could serve as an unintended behavior, not as an argument whose merits for a particular course of action are carefully considered.

10. Complexity of knowledge

The second property (ability) of knowledge that may be important in this process of judging whether a position is an informative guide to behavior is the complexity of the knowledge underlying the attitude.

Given that attitudes can vary from one dimension of knowledge, based, it follows that the ratio can vary in the number of distinct dimensions of information, which are included in it. Some attitudes may be simple because they are based on one dimension of knowledge, while others can be complex because they are based on many different dimensions of knowledge. Indeed, the complexity of knowledge has received a significant insight into social psychology.

11. Effects of Attitude on Attitudes and Behavior

The continuity of the relationship „behavior-attitude“ suggests that the simple amount of information related to attitude may not be the only property or even the most critical property responsible for the effect of knowledge on the sequence of behavior. It is possible that the total amount of knowledge related to the attitude is strongly related to the complexity of the knowledge underlying the attitude. That is, the greater the number of common beliefs associated with the attitude, more likely that these beliefs reflect multiple diffuse dimensions of information.

As the elevated level of knowledge is likely to lead to more complexity, the likelihood that attitudes with high knowledge (which have many dimensions of knowledge) will be derived from a dimension directly related to the purpose of behavior, attitudes (which have a small dimension of knowledge). Thus, in the range of behavior that a person may perform in relation to the subject of behavior, it can be expected that attitudes with a high level of knowledge (complexity)



in the sense of the word have a greater impact.

This means that with attitudes that are more sophisticated one of the dimensions of knowledge is likely to be relevant to behavior. The simple attitudes can be perceived as informative only for a narrow range of behaviors for purposes directly related to the dimension of knowledge that underlies this behavior. Thus, the past effects of behavioral and behavioral succession due to knowledge could in fact be due to the complexity and behavioral applicability of the knowledge underlying the attitude.

The logic of knowledge plays a role in the sequence of behavior. Moreover, the explanation of accessibility does not give clear predictions about the moderate role of behavior or behavioral thinking. In contrast, the explanation of attitudes' conclusions clearly defines the role of these factors.

12. The theory of planned behavior and the interference between knowledge, attitude and behavior

Theory of Planned Behavior (or briefly TPB) is one of the most widely cited and applied theories of behavior. It is one of the closely related families of theories, which adopt a cognitive approach to the explanation of behavior, which focuses on the attitudes and beliefs of individuals.

TPB (Ajzen 1985, 1991; Ajzen and Madden 1986) evolved from the theory of reasoned action (Fishbein and Ajzen 1975), which envisage an intention to act as the best predictor of behavior. The very intent is the result of the combination of attitudes towards behavior. This is the positive or negative assessment of behavior and its expected outcomes as well as the subjective norms that constitute social pressure exerted on a person as a result of the perception of what others think they should do and their inclination to comply with them.

TPB added a third set of factors that affect intent (and behavior); perceived behavioral control. This is the perceived ease or difficulty with which the individual will be able to perform or assert the behavior and is very similar to the concepts of self-efficacy.

13. Stages of change (Trans-theoretical model)

The Stage of Change model (SoC) Stages of Change is a widely applied cognitive model that divides individuals into five categories that represent different stages or "levels of motivational readiness", consistent with a continuous change in behavior. These steps are:



- (i) Preliminary reflection;
- (ii) Reflection;
- (iii) Preparation;
- (iv) Action;
- (v) Maintenance.

Initially developed in connection with smoking and now often applied to other addictive behaviors, the justification behind the phased model is that individuals in the same phase have to face similar problems and barriers and can thus be helped by the same intervention (Nisbet and Glick 2008).

The module does not provide information about how people change or why some change more efficiently or faster than others do. This model shares the problem with other cognitive models because it is selfish (focusing on itself) and therefore misses the structural economic, environmental and social factors that affect the individual's ability to change behavior. It is not that the influence of these factors is denied by the model, but rather that they are beyond its boundaries. For example, Prochaska et al. (1992: 1103) note that:

"Families, friends, neighbors, or employees ... are aware that prejudices are a problem, [...], they often do it because of pressure from others."

GAMES AND TASKS

Try to define the knowledge, attitude and behavior.

What is interaction between knowledge, attitudes and behavior?

How can you describe knowledge and attitudes as factors of behavioral coherence?

Define the impact of knowledge on attitudes and behavior and the restrictions related to research on cognition and consistency of behavior, and explain the effects, the behavioral moderation and the complexity of knowledge.

What can you say about effects of Attitudes and Behavior?

In a small group, discuss about different theories, which interfere between knowledge, attitudes and behavior like the theory of planned behavior and the Stages of change (Trans-theoretical model). Which one is in your opinion the



most representative?

Draw a mental map of the interaction of knowledge, attitude and behavior.

PRESENTATION OF THE LEARNING OUTCOMES

In your own professional experience, try to notice and describe the dynamics of development of your students or trainees during your classes. Then make a presentation. Think about how the new knowledge changed their attitudes and their behavior. How did previously their attitudes and behavior affect the process of acquiring new knowledge? Discuss the results in a group.

GOOD PRACTICES

The findings commented above also have implications more specifically for research in the role of knowledge in attitude–behavior consistency. Some experimental demonstrations of effects for knowledge provide some of the strongest evidence to date that knowledge plays a causal role in attitude–behavior consistency and she delight on why this construct is related to attitude–behavior consistency.

The role of knowledge has been assumed to be a function of differences in attitude stability or accessibility or perhaps some other property of attitudes, such as confidence.

A recent research proposes and tests a new conceptual perspective for understanding the role of knowledge in attitude–behavior consistency. Because increases in attitude-relevant knowledge are likely associated with greater complexity of knowledge, attitudes based on extensive knowledge are more likely to have at least one dimension of knowledge relevant to a given behavior than attitudes based on little knowledge.

Thus, knowledge behavior matching effects could be one mechanism by which knowledge influences attitude–behavior consistency. In addition, even when a behavior has little relevance to the specific knowledge underlying an attitude, many experiments suggest that people still follow their attitudes when attitudes are derived from multiple evaluatively consistent dimensions because of their willingness to extrapolate beyond what they know.

Although this new attitude inference perspective does not preclude traditional explanations, it does differ from traditional explanations in interesting ways.



PRACTICAL APPLICATION

The objective of methods “NEWave in Learning” (built based on suggestopedical teaching methods) and training, making it accompanies, is to equip you with the knowledge and skills to develop your own learning content, to teach it in a quick, an easy and joyful way that leads to much higher results.

Suggestopedia, as a system that is scientifically grounded and experimentally tested, occupies a particularly large part of the present work. In this area ensuring the good and effective interaction of knowledge, attitudes and behavior, is highly essential.

By knowing different theories for IKAB you will be able to apply it fully in your work and also to enrich it with the suggestions of pedagogical theories and psychological practices.



PSYCHOLOGICAL GOALS

"The teacher is perhaps the main factor in each method of accelerated learning"

Dr. Charles Shmidt

OBJECTIVES OF THE TOPIC

After you get familiar with the topic you will be able to:

- To define psychological goals;
- To interpret the importance of the psychological goals;
- To differentiate the factors that determine how people react in different situations;
- To apply psychological goals in the development of learning material;
- To implement in your work various didactic games related to the psychological goals.

VERIFICATION OF THE UNDERSTANDING

In a group or by yourself, discuss and record the answers to the following questions and tasks:

- Have you noticed how does the emotional state of the students change during training? Write down some emblematic cases from your teaching practice. Explore them in the context of psychological goals: to which goal do they relate?
 - What is the importance of the psychological goals for the environment? How do we model the environment through psychological goals?
 - List the factors that influence the achievement of each goal.

Recall a course or a program that you completed, set psychological goals related to it, and then examine them in the context of the theory.



CONTENT INTRODUCTION

The place of the psychological goals in the education process.

We **think all of the time**. We think about what we will do and about what we have already done. We **plan, discuss, imagine, remember**, we try to understand the world around us, and when we fail to comprehend, we **try to understand** why. This is **our inner dialogue**, which is an integral part of our existence. It determines **who we are**, how we **perceive ourselves** and how we **present ourselves** to others.

How does this relate to the learning process? The **self-efficacy** is a concept introduced by Albert Bandura. It is defined as "people's belief in their ability to achieve a certain level in a particular activity so that it influences the events affecting their lives." A number of studies have shown that this belief directly affects the **achievements of the learners** and where they will set the limits of their capabilities. In other words, people **evaluate the effects** of their actions. Their interpretations of those effects help them shape their **beliefs about efficacy**. The results which are interpreted as successful, increase their efficacy. Those that are interpreted as failures lower it. (Bandura, 1986. For more information about the theory, see Chapter "Socio-cognitive learning").

Can we influence those processes in a learning environment and to what extent? The works of Dr. Jack Canfield and Dr. Beverly Gayleen highlight the importance of creating and maintaining an environment of **continuous emotional support for the learners**. They focus on the **successes** of the students, not on their failures. This allows each learner to tackle many of their negative beliefs about themselves and to **increase their ability to learn**.

ICAL (International Center for Accelerated Learning) integrated and began to purposefully use **the 7 psychological goals** in the design of training courses, using Canfield's theory and its specific suggestions on how those goals should be applied in a learning environment (*100 Ways to Enhance Self-concept in the Classroom: A Handbook for Teachers and Parents*, Jack Canfield). Basically those goals entangle **7 factors** that determine **how people react** in different situations. When teachers are aware of these seven factors, they can **improve their teaching**.

The Seven Factors

Strengths

They link the cognitive and **the emotional content** of an activity to **the strengths** of the learner. Most often that happens within an activity that demands a set of knowledge which is **already familiar** to the learner. The learner uses it as a **springboard** to reach for the new material. In other words, you feel good (or



not so good) at all levels. For example, you are good in languages, singing, bicycle repair but you are not good in maths and taking exams.

Purposefulness

Here the learner is shown **the relationship** between the learning **content** and **its goals**. During the learning process everyone has **personal** and **professional goals**. This psychological goal provides and ensures **the connection** between those two types of goals and **the content**. It represents also the psychological side of the achievement. It is the ability **to believe that you can** achieve a goal.

Interaction with others

This factor defines how you **connect**, cooperate, **work**, and live with other people. It also includes the knowledge of how to work in a team having a sense of shared responsibility with the other people and towards the **environment** around you.

The relationships in the classroom are manifested by the **learners' attitudes** to each other and their attitude to **the studied material**. As far as student relationships are concerned, they are able to work with the new material in an environment in which **they interact with the others**. This is another psychological view that leads to the learning of the material in **real life situations**.

Self-definition

Self-definition refers to the words you use when talking about **yourself**. Those words define who you are, what you think you are, and **what you can become**. All psychological goals are important and **self-definition** is of paramount importance. Mastering the learning contents directly relates to the learners' ability to **weave it into their personality**. The personal activities directly address this psychological goal. When students know the material at intellectual level but do not apply it in their work and/or their lives they have a problem with self-definition. This is the difference between knowing something and embodying it.

Physical presence

It covers the psychological components related to the **physical body of a person** - how you perceive your body and where you position it among other people. For example, what difficulties do you face while working in teams, groups of three people, or pairs?

Moreover, how do you feel when you stand in front of people and present content? When learners **participate in an activity** in which they present their



work in relation to the new material, their physical presence is addressed. To create something while using the new material in the protected environment of the classroom is one thing. To do it in **a real situation** being in the spotlight is something completely different. Being in the spotlight is simulated during the learning process when people have to present something to the group from the center of a semicircle. In this way, with the help of the passive approval/correction of the teacher, the **learner is able** to gain **confidence** to use **the new material**.

Supportive environment

It relates to the psychological trait of a person who **thinks independently** and can **independently** start an activity, who **knows where to find** information and **how to solve** a problem. The supportive environment includes fostering **the creativity** to invent **a solution to your own problem**.

Addressing systematically the supportive environment of the learning process allows the students to **perceive the information faster** by improving the security level of the environment.

The participants **feel the support** of the teacher, the others group members, the teaching **materials**, and **the specific classroom**. Thus, the psychological barriers associated with the traditional learning environment disappear. Moreover, once a supportive environment is established and maintained in the classroom, it can be transferred to **the workplace** and beyond.

Inner dialogue

This is **the voice in your head**, which is also known as "rational thought". Sometimes this inner voice can be positive or negative, so it can **improve** or **worsen your performance** depending on what you hear in your head. In certain learning situations all learners tend to **assess to some level** their abilities. Most trainees enter the corporate learning environment having expectations of **what they can** and **cannot learn**, a premise grounded in the traditional education. By using **pace, time, music** and **conversation**, the teacher can start to replace the learner's restrictive internal dialogue with **a positive internal dialogue**. Over time, the trainee turns themselves into **their own coach**.

Design of the educational material and teaching according to the psychological goals

The designers of training courses and **the trainers use** each of **the multiple intelligences** and all **psychological goals**. This does not mean that each activity should address all the ways of perception of the multiple intelligences or aim at all psychological goals at once. In **several consecutive activities**, the **separate pieces of information** can be **activated**, by using **different channels** and **ways of perception**, responding to **a different psychological goal**. For the learners in the training courses, it is important to **acquire knowledge** of the material and **confidence to use** this knowledge. This is achieved by using didactic means (the content) and through psychological means.

That is why putting purposeful effort for achieving confidence in learners should



be foreseen at the early **stage of course planning**. Some ideas on how to do this can be found in Appendix 3. The psychological goals that will **define the participants' behaviors** which they **will adopt** throughout the course should be written down during the initial design stage. We need to be very specific when choosing and compiling psychological goals. Each goal must relate to a **strictly specific aspect** of the **effectiveness of the learners** in their work rather than to their overall performance.

The psychological goals and the learning goals are **two separate components** of the training design. Psychological goals **focus on the behaviors** that will be developed during the training, while didactic goals refer to the knowledge or skills that **will be acquired at the end of the training**.

Prof. PhD. Lozanov describes the suggestopedagogists as **psychotherapists**, who are also **experts in their field**. The trainer has tremendous power and is capable of making the situation better or worse. If the trainer does not manage the psychological goals, the psychological goals will govern the group.

When we examine in more detail communication and suggestion, we can see that communication happens in four ways:

1. **Verbal** - speech and writing
2. **Non-verbal** - noise, music, pictures, clothing, art
3. **Paralinguistic** - voice tone, voice power, gestures, body language, eye contact
4. **Silence** - can express boredom, indifference or fear.

It is not possible not to communicate. Regardless of what we do, we always give some message.

GAMES AND TASKS

Task 1

Choose an easy teaching subject, such as teaching the Present Simple Tense in English, and try to set psychological goals into each factor.

Task 2

Set one psychological goal for each factor from the last course (programme) that you taught.

PRESENTATION OF THE LEARNING OUTCOMES

Task 3

Make profiles of your students that are relevant to each of the factors of the psychological goals. What behavior should they demonstrate on each of the factors after completing your course? How will this behavior be applied in the real environment of their work? By what means will that behavior be expressed?

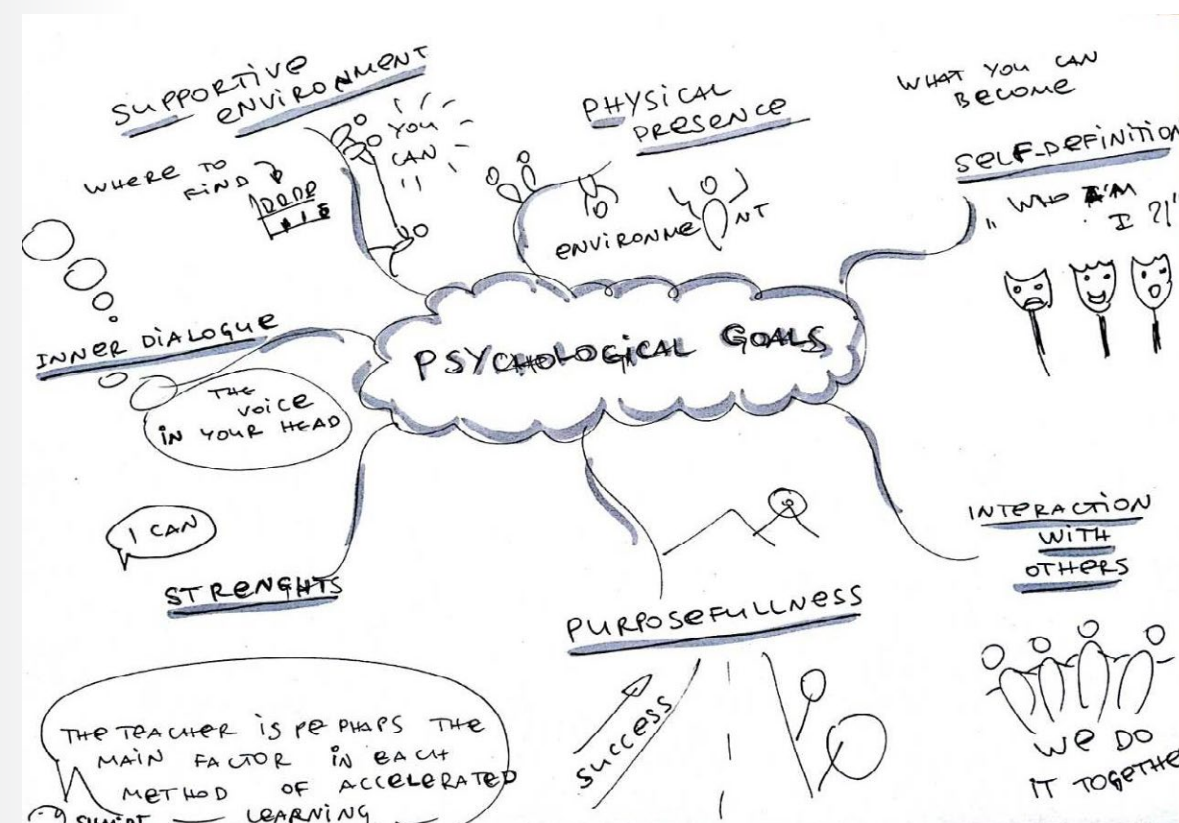
Task 4

Analyze the application of psychological goals in comparison to the standard goal-setting (for example compared to the Bloom Taxonomy in Chapter: Bloom Taxonomy).



Practice how to set psychological goals for a training of a group of adults. Consider the appropriateness of the goals for the age group of the participants. Set psychological goals in the context of a particular environment. Set psychological goals for your next course. Set one goal for each factor. Present your work to your colleagues. What feedback do you get?

MIND MAP AND BASIC TERMINOLOGY



Check the interview in the Appendix. To what extent does it talk about the contents that you covered in this Chapter? Were there any new terms and information for you? Write down in detail what you want to learn about accelerated learning and psychological goals and send an email to the contacts mentioned in this study.

PRACTICAL APPLICATION

How to apply the theory of psychological goals? Take a look at our ideas in the following appendices which you can use in your work. What could you add to them and what will be the results of applying them in your work? Document the answers to the questions and write us a feedback.

Appendix 1

Language of the trainer and self-assessment of the trainee

"The Self is acquired.
It is not inherited.
It consists of collected data! "(ICAL)



GOOD PRACTICES

Here is a list of phrases often used by the teachers that carry a negative suggestion and should be avoided:

1. Do not forget to ...
2. This lesson is a bit more difficult than...
3. I want you to ...
4. Try to ...
5. Yes, however ...
6. Some of you may find this difficult, but ...
7. If you are having difficulties with this exercise ...
8. This is wrong ...
9. This is not true ...
10. When you find out that you have made a mistake ...

Appendix 2

Self-assessment of the trainer and the trainee

Note: The following lines are an excerpt and a slight adaptation of Dr. Charles Schmidt's late works.

"The teacher is perhaps the main factor in each method of accelerated learning. Some of the most important skills and qualities that an effective teacher is constantly trying to demonstrate and refine are:

1. Love and expertise in the subject taught;
2. A spirit that is powerful, joyful, positive and ready to play;
3. Complete and conscious personality;
4. Well-developed sense of authority;
5. Balanced self-assessment and evaluation of the others.
6. Well-developed sensitivity and understanding of both individual and group psychological processes;
7. Ability to clearly define, demonstrate and conduct classroom activities;
8. Good sense of drama and role-play;
9. Well-developed perceptual skills; a good level of observation of what is happening in the classroom. Do learners "grasp"? Are they interested in the material? Do they need a change of the pace?
10. Well-developed sensitivity to music and arts and basic knowledge of the subject;
11. Excellent skills for verbal expression;
12. The ability to organize the material so that it is clear, efficient, interesting (even intriguing) and predisposed to further in-depth research;
13. Sense of humour!



14. Flexibility and ability to adapt lesson plans "on the move" when it is obvious that something is not working well, including in group dynamics;
15. The ability to accept ... actually even welcome ... feedback from learners and colleagues, striving to help learners to learn more, faster, better and with natural pleasure;
16. True faith in the endless potential of each of us to study!

On a scale from 1 to 5 (1 being of highest value), evaluate yourself as a trainer at the present moment on each of the 16 qualities. Write yourself recommendations for improvement on each quality.

Appendix 3

Take a look at the prerequisites listed below and write down those that are relevant to your work and the environment around you. How can you improve your work and learning environment to develop each of the prerequisites? Take notes on each of them. Share them with your colleagues.

Some prerequisites for improved learning quality:

1. A state of relaxed awareness - opening the senses for maximum receptivity;
2. A positive perception for oneself - experiencing the Self with the help of as many inner feelings as possible - successful condition for accumulation and application of knowledge and skills. Receiving of recognition from someone;
3. Supportive environment - both physically and psychologically. Many people think they learn easily at one particular place in their home: "This is my place to learn." Avoid negative and cynical people while studying.
4. Ability, flexibility and ease to use our full range of capabilities and skills. With a little practice, we can easily learn how to combine them so that we can strengthen and enrich our knowledge.
5. Motivation - rather internal (I want to learn this) than external (They want me to learn this.); developing curiosity and interest in the subject;
6. Good psychological balance, emotional stability;
7. Good health - balanced food and physical activity.



CHAPTER

TEMPERAMENTS

"When we survey human life we shall have to be especially attentive to this riddle which each person presents, for our entire social life, our relation of man to man, must depend more upon how in individual cases we are able to approach with our feeling, with our sensibility, rather than merely with our intelligence, that individual human enigma which stands before us so often each day, with which we have to deal so often."

Rudolf Steiner

OBJECTIVES OF THE TOPIC

After you get familiar with the topic you will be able to:

- To define and describe features of each of the four types of temperaments;
- To recognize the characteristics of each temperament;
- To define the temperaments of your students;
- To give examples of how you can use the theory of temperaments in your work;
- To plan how to apply the theory in your courses;

To analyze and evaluate the options for applying the temperaments in your teaching.

VERIFICATION OF THE UNDERSTANDING

In a group or by yourself, discuss and record the answers to the following questions and tasks:

- What types of people can you determine from your experience and work? Visualize your answers.
- How do you approach people in relation to their character? Are there certain groups of people to whom you relate in a certain way? Can you describe them and point out certain traits? Which are they? Visualize your answers.
- Do the different temperaments influence the learning process according to you?



- Think about which type of temperament is represented by each of the four figures.

CONTENT INTRODUCTION

Temperaments are the key to understanding needs. Since ancient times, people have tried to develop typology and explain the different characteristics and modes of human behavior. The Greek physician **Hippocrates** (460-370 BC) divided for the first time the four basic types of characters, or the so-called temperaments - **sanguine, choleric, phlegmatic and melancholic**, which we still use today.

A person is never defined by a single type of temperament. In **human nature**, all four temperaments are represented and they act in integrity and **interconnectivity**. We associate a person with one or another temperament depending on which of them is manifested most clearly.

The different types of temperaments influence the learning process. It is very important that a teacher is able to recognize the temperaments of their students and also of their colleagues. A deeper understanding of the human nature and relationships can help us a lot in how we connect to other people. Steiner says: *"We need only utter the word **temperament** to see that there are as many riddles as men. Within the basic types, the basic colorings, we have such a **multiplicity** and **variety** among individuals that we can indeed say that the real enigma, of existence is expressed in the **peculiar basic disposition** of the human being which we call temperament. And when the riddles intervene directly in practical life, the basic coloring of the human being plays a role. When a person stands before us, we feel that we are confronted by something of this basic disposition."*

Temperaments spring from the inner nature of a person, but are **manifested by the actions** and by everything which **that person reveals** to us **externally**. The temperament reveals itself as something related to the individual, which makes each person different from the others, as well as a unifying factor



to define groups with common characteristics. Thus, on one hand, the temperaments are connected to the "innermost essence of the **human being**" and on the other to the "**universal human nature**" (Steiner, The Mystery of the Human Temperaments, p. 5).

The four types of temperaments are:

- **Sanguine**
- **Choleric**
- **Phlegmatic**
- **Melancholic**

The Sanguine

People with a sanguine temperament have a **cheerful nature**; they are joyful in most situations, have a quick mind and are very **interested in new ideas**. Sincerity and optimism give this type of character **enthusiasm** and **exaltation**; although under certain circumstances they create an impression of being **careless**. In general, **the open nature** and **the curiosity** make the Sanguine **sympathetic, competent** and **knowledgeable** interlocutors. Having those qualities they often receive event invitations and their company is highly appreciated because they always create a cheerful mood around them. The weakness of this temperament lies in its **inconsistency**. The feelings and thoughts of the Sanguine can change quite often and easily. In a working environment, they are **not pedants**, but rather they create the impression of people who can be easily influenced and distracted, so sometimes they are thought of as **superficial** or frivolous. They successfully compensate for the lack of precision and reliability by their innate **talent for improvisation**.

The Choleric

What is most typical for the character of the Choleric is their propensity to **explode into rage**, anger or aggression within seconds. One can predict the outburst by the appearance of **fiery red color** of their face and angry, vertical wrinkles on their forehead. Otherwise the Choleric are **hard-working** and **full of energy**. If you observe such a person, you will find out that they start any new work with plenty of excitement and enthusiasm. However, they often forget themselves and **act without any respect** for the others. For the Choleric, the achievement of **the specific goal** is paramount, despite the frequent exchanges of rough replies or **outbursts of anger**. They never react out of prudence, but simply because the specific thing has an absolute priority for them. At the workplace, the Choleric manifest themselves as people who **prevail** despite the unfavorable circumstances and as **hard workers**.

The Phlegmatic

Unlike the Choleric, the Phlegmatic rarely **demonstrate aggression** or excitement, and usually **remain calm**. **Self-control** and **firmness** are for the Phlegmatic what the enthusiasm and the ease are for the Sanguine. Their observable



immobility and clumsiness sometimes make them look lifeless and communication with them can be rather difficult. The Phlegmatic are people who are **content with themselves** and to whom each new thing seems like a threat. As for their feelings for others, they are "**true companions**", to whom one can reveal without worries their soul if in trouble or feeling insecure. No excitement is to be expected from the Phlegmatic. They are **conservative** and are satisfied with the ordinary. At work they rarely take the initiative or demonstrate flexibility and mobility. Besides, they do not have a burning desire to learn new things or to offer creative solutions to the team. Their proverbial **calmness** and **passivity** make them an indestructible backbone in turbulent times because of their **well-balanced temper**, reliability and exceptional **stamina**.

The Melancholic

Melancholic people are described as **sensitive** and **sad**. They often feel despondency and are **notorious pessimists**. They seem **unstable** because of their gloomy moods. Their serious temper does not make their life easier. They see danger everywhere and quickly surrenders to it. The Melancholic prefer to devote themselves to things that cannot be explained and to deal with the unreal rather than to face the reality. For this purpose, they **need silence** and therefore avoid chattering and noisy companies. Such communication contradicts to their shy nature and would bring them stress rather than amusement. Their **propensity for reflection** is often expressed by the fact that they constantly undergo analysis and assessment of themselves and the things that they do. The Melancholic **particularly value creativity and art**. Here they can fully unfold their **fantasy** and their contemplative essence. In their communication with others, the Melancholic are capable of expressing **great sympathy**, which can reach a level of co-experiencing. This sentimentality distinguishes the Melancholic as **faithful** and **devoted people** who rely heavily on the trust of the people who surround them. In their work they are **patient** and **very attentive**.

GAMES AND TASKS

Task 1

In order to quickly determine which type of temperament you belong to do the following test. Typically, the tests that determine the temperament of a person are made up of a long list of questions. This is not without a reason, as the traits of character are complex and there are many factors involved in their determination. Still there are some special features in our physical state that are always inherent for a certain type of a temperament. This quick and easy test is based on one such feature.

To do the test, just think about how your hands feel most often:

- Hot and damp - choleric
- Warm and dry - sanguine
- Cold and dry - phlegmatic
- Cold and damp - melancholic

Note: Do not forget the most important thing! There are no absolute and clear types of temperaments. They are always determined by the predominant condi-



tion of a person or the predominant number of answers to the different temperament tests. For example, a Choleric in one situation may react as a Melancholic in other and vice versa.

Task 2:

Describe and differentiate features for each type of temperaments. Specify at least two characteristics for people of each type. You can also draw a mindmap of the four types of temperaments.

Task 3:

Give examples of activities that are appropriate for each type of temperament. Say why you think so.

Task 4:

Analyze the different types of temperament in relation to David Colb's Theory of Learning Types (see Chapter TEA and TSC).

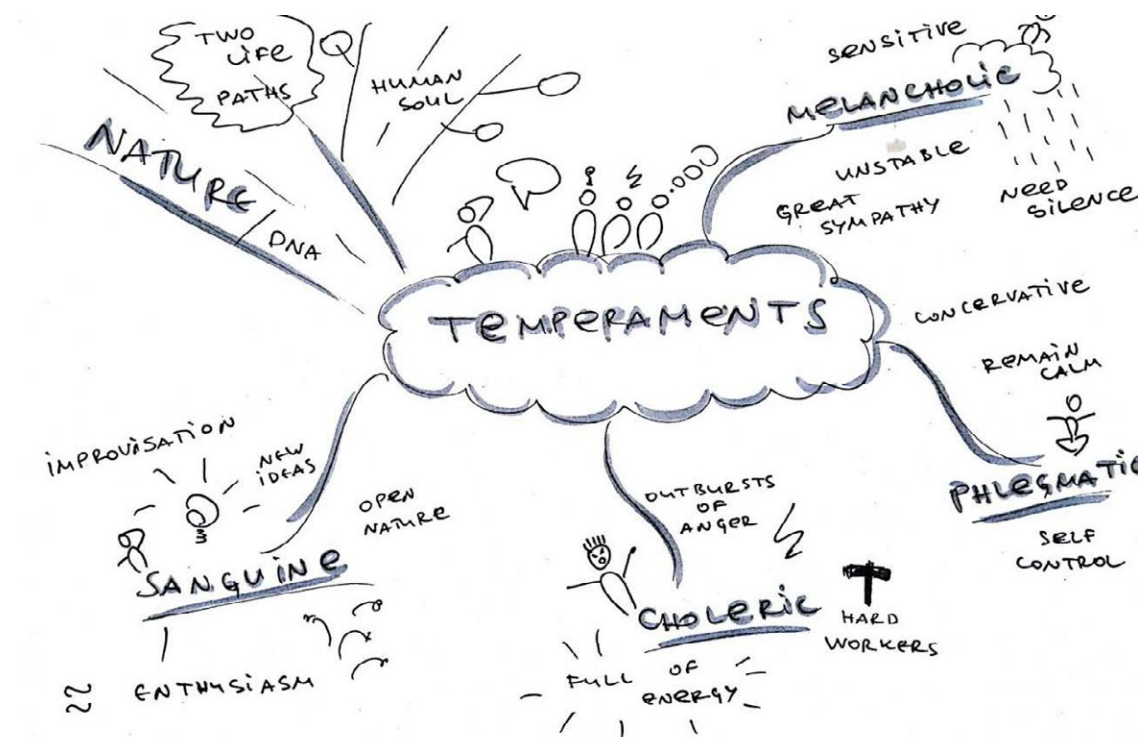
Task 5:

Plan a lesson based on your knowledge of the four types of temperaments. What activities would you plan in the lesson to make sure that all kinds of temperaments are included?

PRESENTATION OF THE LEARNING OUTCOMES

Present to your colleagues a lesson planned according to the four types of temperament. What feedback do you get? Describe the questions and suggestions of your colleagues and make a new plan based on their recommendations. How does it address the temperaments' theory?

MIND MAP AND BASIC TERMINOLOGY



GAMES AND TASKS

- Check out the article following the link and think about the impact it may have on your workplace and on your work with your colleagues. Can you draw conclusions about how you work with your colleagues using the knowledge and examples given in the article of the four types of temperaments? What conclusions can you draw from these examples about the work of your students?

Theory of Temperaments(in Bulgarian):

<http://www.nabludatel.bg/index.php?id=162259>

- Take a look at the section on page 14 from the book onpractical application of temperaments (A Case Presentation, in English). The case example is for a child aged 9. Carefully observe the reactions of his parents and think about the development of this child in the future. Imagine him as an adult. What do you think his behavior would be as a consequence of what he has experienced as a child? After making these conclusions, think of an example from your practice with adults where you can find such a connection between the behavior of an adult and what happened to them in their childhood and teen years? How would you help this adult to be complete in your classes and in his learning? Take notes and check the psychological goals theory in the Chapter "Psychological Goals".

Temperament: Theory and Practice, Stela Chess and Alexander Thomas:

https://books.google.bg/books?id=sE9Bg-r4yUcC&printsec=frontcover&hl=bg&source=gbv_ViewAPI&redir_esc=y#v=onepage&q&f=false

(page. 14-17)

PRACTICAL APPLICATION

Describe how would you use the knowledge about the temperaments in your work? Which aspects of the planning and your work would change as a result of the knowledge you acquired about the temperaments?



CHAPTER

MULTIPLE INTELLIGENCES

"As for my definition: The term "intelligence" is a biopsychological potential to process information."

Howard Gardner

OBJECTIVES OF THE TOPIC

After you get familiar with the topic you will be able to:

- To describe, arrange, and define the multiple intelligences (MI) according to Howard Gardner's Theory;
- To distinguish between different types of intelligences and to derive their characteristics;
- To give examples of particular individuals, yourself or others according to the theory of MI;
- To combine the theory of MI with other theories included in the "NEWave in Learning" methodology;
- To apply the theory of MI in order to create games and activities that you conduct with learners;

VERIFICATION OF THE UNDERSTANDING

In a group or by yourself, discuss and record the answers to the following questions and tasks:

- Create your vision of intelligence using keywords. What is human intelligence for you? How is it expressed? What are its characteristics? Can you give examples that prove your position?
- Use creative materials to visualize your ideas and give your own definition of intelligence. Then check to what extent your definition corresponds to the definition of Howard Gardner given below.
- Make the test on multiple intelligences for adults:

<http://www.literacynet.org/mi/assessment/findyourstrengths.html>.

Thinking about the results, can you confirm them from your life experience?

CONTENT INTRODUCTION

The American psychologist Howard Gardner refutes the traditional psychometric understanding about intelligence in his book "Theory of Multiple Intelligences" (1983). According to him, there is no single intelligence that can be



measured by standard IQ tests. Rather, there are multiple intelligences, which exist independently of one another. According to the author all human beings possess all types of intelligence, but to varying degree. He describes the intelligence as "an ability", "a gift", "mental skills" which he calls "intelligences". According to Gardner people differ from each other by their skill levels and by the combinations between them. Howard Gardner is a Professor of Cognition and Education at Harvard University, USA.

The **Multiple Intelligences** (MI) theory is based on the **biological origin** of any **problem solving skill**.

People acquire knowledge in different ways. Everyone has their own **unique mental** abilities and **talents**. And we, in our role of teachers or educators, have to take this in consideration.

In order to draw these conclusions, the author explored sources on **human development**, the development of **gifted individuals**, studies on **cognitive skill** impairment caused by brain damage, studies on groups of exceptions, including people with autism, etc. Gardner researched in depth various studies of **cognition** over the centuries, **the types of cognition** in different cultures, and **psychometric studies**. He also paid attention to studies comparing various tests, and **psychological** and **pedagogical** research papers, tools for exchange and task summarization. Only the **intelligences** that met all the set conditions became potential candidates to be included in the theory. The selection criteria are described in detail in Chapter 4 of the book (Frames of Mind - 1983).

Types of intelligences formulated by Gardner:

In 1983, Gardner initially published 7 types of intelligence. Subsequently, he added two more - the naturalistic and the existential. In order to prove each of the intelligences Gardner sought evidence in the brain physiology. A brief description of the intelligences formulated and undeniably proven by Gardner is listed below:

Verbal-Linguistic – It includes the ability **to operate with words orally** (storytellers, speakers, politicians) as well as **in writing** (poets, writers, playwrights, journalists, editors). The contemporary pedagogical practice requires above all the development of this type of intelligence. At school students **listen, write, read** and **speak**. People who belong to this intelligence type love the order from an early childhood; they are **systematic**, feel well the conformities and **think logically**. They love **to listen** and learn to speak, **read** and **write** correctly at an early age. They have **good memory**, so they remember easily and with pleasure. They don't feel embarrassed in front of an audience and willingly recite verses. They **learn easily** foreign **languages** and the best way to train them is through **stories** – the younger through **fairy tales** and the older through stories, debates and discussions.

Logical-Mathematical - This is the ability **to operate with numbers** (mathematicians, accountants, statisticians) and **to think rationally** (scientists, computer programmers, logicians). If a person has this kind of intelligence, you will quickly notice that they love above all **accuracy**; they are **amazingly organized**; have **abstract thinking** and **like calculations**. From an early age such people show interest in and learn easily about computers, **logical exper-**



iments and **problem solution**. They also engage successfully in mathematics, physics and chemistry - subjects that require **precision, well-developed logic** and specific **mindset**. To attract their interest, you have to give them **various tasks**, to visualize by using **charts** and **tables**, and to offer them various **experiments** and **mathematical games**.

Musical-Rhythmic - This is the ability **to perceive** and **to admire** music (a musical critic), **to create** and **to transform** it (a composer) and **to perform** it (an actor, a singer). A person, who has developed **musical intelligence**, easily remembers **melodies** and is able **to reproduce** them. Such person is also very receptive **to rhythm**. The people with musical intelligence manifest it by their **interest in sounds**. They are **sensitive to tones, rhythm** and **tempo** and perceive music very emotionally. From a very early age they are able **to understand** complex **musical forms**. They are **very emotional** and have **well-developed intuition**, so in the learning process it is good to use their **favorite music**. They also pay attention to **the rhythm of the speech** because their good understanding and knowledge retention depend not only on what is said, but also on how exactly the words sound.

Bodily-Kinesthetic - It includes **the skill** to use **the body for self-expressions**, to communicate **feelings** and **emotions through movements** (an athlete, a dancer, an actor), **to use the hands** to transform various objects (a craftsman, a sculptor, an engineer, a surgeon). Such people **are very skilful** and quick **in their actions**. People with this type of intelligence can be distinguished from an early age by their good **coordination**: they have **very accurate control of their body** and feel **the rhythm** very well. They have **quick reactions**, well developed body **reflexes** and quickly learn handling various objects and tools. After all, such people **love to act**, to move, to touch quickly everything and they learn not through seeing but through **touching** and even tasting. They remain indifferent to pictures and visual images, and **perceive the world through tactile sensations** so, they remember well what they have done, not what they have heard or read. They learn better when they **act** and **play** with objects while listening to information. They quickly shift their attention and as a result **concentration problems** can arise which the parents often take for laziness, forgetfulness and unwillingness to focus. For such people it is better to receive information by means of **movements** and **visual models** that can be touched and manipulated. They need **frequent breaks** during which **to move** or to do simple exercises.

Visual-Spatial – This is the gift **to perceive the world visually** and to **analyze** the received information (a hunter, a scout, a guide), as well as **to transform space** (an architect, an artist, an inventor, an interior designer). People with this type of intelligence are **receptive to colors**, shapes, lines and relations between objects in space. They can **graphically express** their ideas. If you notice that a person **thinks in pictures**, creates visual images, **remembers better**, precisely with the help of **images**, you observe what is typical for this type of intelligence. Such people often use **metaphors** in their stories, easily read **maps, tables** and **charts** and are sensitive to the **colors and shapes** of the surrounding objects. They show early their interest in **fine arts**, so it is recommended to use **illustrations** in their training and to stimulate their interest. With the help of visual images those people will easily **consolidate their knowledge** and will remember what is otherwise difficult to perceive through logic.



Interpersonal - The ability to detect **moods, motives**, intentions and **emotions** of **other** people. This is also the ability **to communicate**, i.e. **to exchange information** with other people in **verbal** and **nonverbal** ways through sign language, music and speech (salespeople, politicians, managers, teachers, social workers). From an early age the people with this **social type** of intelligence understand, make arrangements and **get along easily** with other people, they **interact** and love to be among others in general. When they grow up, they acquire the ability to **recognize other people's thoughts and plans**, thus they often begin to manipulate people. Such people have many friends, show activity among others and prefer to mediate disputes and conflicts. Because of their **enjoyment of socializing** with people, this type of child best perceives knowledge namely in **teams**, so do not try to keep them at home hoping that they will focus and learn lessons. Teach them by **involving them in group work**, discussions, disputes, and give them the opportunity **to express their opinions**. Encourage them by giving them chances to take part in extracurricular activities in any **social forms**.

Intrapersonal - This is **the just awareness** about **oneself**, understanding one's own **strengths and weaknesses** which limit one's beliefs, motivations, attitudes, desires and emotions. Such people have high levels of **self-control, self-assessment** and **self-esteem** (a psychologist, a psychiatrist, a philosopher). This type of intelligence is manifested through the other types defined by Gardner. People with this kind of **intuitive intelligence** are inclined to **self-assessment**, even **self-examination**. They are **introverts by nature**, feel deeply their strengths and weaknesses, and understand well their own **emotional turmoil**. From an early age they have their own **values** and **purpose in life**. Their actions are guided by **a strong intuition, self-motivation** and desire **to excel**. Their inner harmony is sometimes disturbed by deep analysis of their personal experiences which is constantly running. When in teaching, they need **independence** and to be given the opportunity to organize the learning process by themselves. They do not need control as they are very well **self-organized**. Such people should not be forced, because that will only strengthen their resistance and their desire to hide in their inner world and this will not lead to anything good.

Naturalistic - Naturalists have the ability **to understand nature** and **to sense regularities**; to orientate among many **living organisms** (a botanist, a veterinarian, a forester). They are also **sensitive** and **caring**, and are interested in certain features of the world around them (a meteorologist, a geologist, an archaeologist). Such people **love to be outside** and their learning process is most effective during **trips**, green schools and through other means by which they will have the opportunity **to explore the things** that excite them.

Existential - The ability and willingness **to formulate questions about life**, death, and other **existential questions**.

In short, according to Gardner his theory leads to **three major** conclusions:

1. **All people** have **the full spectrum** of intelligences and that is what makes us human beings from **a cognitive point of view**.
2. **No two people** in the world **are identical** (even twins). There are no two people who have **a similar intellectual profile**. Different individuals acquire



different life experience, even when they have similar genetic material.

3. Having **high intelligence** does not necessarily mean that **it will be manifested**. People who are genius in their intelligence **can waste it** on activities which do not relate to it directly.

GAMES AND TASKS

Task 1

Choose a topic from the subject you teach and try to create one activity which develops the knowledge and the skills of the students. Do this for each type of intelligence.

Task 2

Observe which activity brings you biggest pleasure while trying the following sample activities and while using the handbook. Examine it with the help of table in the Appendix at the end of the task.

Logical-Mathematical

- Create a mathematical game using only the things which surround you at the moment.
- Measure the golden ratio of the manual and the place where you are. Read more about the golden ration in Chapter "Golden ration", Part „Suggestopedia"
- How would you explain what *golden ratio* is to someone who hears about it for a first time? Practice doing it with a friend or relative.

Verbal-Linguistic

- Write an attractive piece of news for the training paper "I am learning the best" about a material you choose from this handbook. Post it on the project's blog at: www.gudevica.org, suggestopediainstitute@gmail.com.
- Write a short speech on the topic of Change in Education by quoting one of the authors of the handbook.
- Tell a personal story or a tale that will inspire your students on a topic of your choice.

Musical-Rhythmic

- Write a song about the theories (or one of the theories, the authors, etc.) from the course and sing it.
- Find a rhythm and try to pass it on to someone around you.
- Play something on a musical instrument that is available.
- What is your favorite song, music - think how you can teach through it and what you can teach. Play it and listen to it, can you express your feelings?
- Which song will you choose to pass something to the students?

- Find a life-asserting song (find out what that means in the Theme: Suggestopedia) and think about what you can teach with it?

Naturalistic

- Open the window and feel the wind with eyes closed.
- Explain briefly a natural process of the first person you come to. Think how you would do it.
- Which is your favorite natural place? Describe it to your students? Can you teach them through this story? Think about how you would do it.
- Go out and observe the nature - birds, insects, plants... Describe how you feel?

Visual-Spatial

- Draw the school of your dreams. What is it like? Make a sketch and a plan of what is in the school.
- Take an attractive photo with your phone of one of the mind maps from the handbook and share it on Facebook or by email to: teodor@gudevica.org, suggestopediainstitute@gmail.com.
- Use the mind maps of a chosen topic to invent a game.
- Look at the images in the book and visualize one of them in a diagram.
- Draw a map of the road which you use to go to the place where you teach.

Bodily–Kinesthetic

- Squat evenly 20 times.
- Kick a ball with your feet holding it in the air for as long as possible.
- Skip a rope at least 15 times without interruption.
- Untie and tie a knot - discover how to tie a marine and/or climbing knot on Internet. Describe how you learned to do it?

Interpersonal

- Open a discussion topic related to the topics of this handbook in which you can engage at least two other participants.
- With the help of a Dixit card (Find an image on Internet at: [https://en.wikipedia.org/wiki/Dixit_\(card_game\)](https://en.wikipedia.org/wiki/Dixit_(card_game)) share your feelings of the day, the week, the month ...
- Play a game which is traditional for a certain nation with your students.
- Find out a personal learning goal of one of your colleagues or students and help them to rephrase it. Review what they have set as a goal and how realistic, achievable, and measurable it is. (Use Benjamin Bloom’s Taxonomy for reference)

Intrapersonal

- Find a peaceful spot and share your dream for 2018. Then think of your dream until 2022. Describe them in a diary or personal blog.
- Find a quiet place and spend a few moments on your own. How did you feel and what did you think of?
- Take an interesting book and read a few passages from it in peace. What impressed you the most?

Existential

- Answer the question: “What is the meaning of life?”
- Why did you become a teacher? Answer the question for yourself.
- Spend a few minutes with your eyes closed, trying to observe and focus on your natural breathing. How did you feel and what did feel?

Appendix Table for exploring MI (*Use it to write down your observations from the accomplished tasks*)

Type of intelligence examined	How much time did you spend on it?	Observations during the working process	Notes

PRESENTATION OF THE LEARNING OUTCOMES

- Create a short video or text describing your accomplishments on the topic of multiple intelligences of Howard Gardner. Give your own opinion on the theory and how do you think you can apply it in your work.
- Describe the application of the theory in your work.

MIND MAP AND BASIC TERMINOLOGY

Multiple Intelligences – check again the mind map at:
<http://thetutorreport.com/howard-gardners-9-types-intelligence/>
Types of Intelligence: Which are the main intelligences? What are their characteristics?



GOOD PRACTICES

In his book "The Element", Ken Robinson shares the story of Shawn Carter, born in the working-class quarter of Brooklyn, New York. Later known as Jay Z, he became one of the legends of music and business, one of the idols of his generation. To become the person he is nowadays, he had to overcome the skepticism and mistrust of his neighborhood, his friends and the people who surrounded him. When he left the neighborhood, they called him "crazy". His role model is Russell Simmons, and nowadays just like him Jay also heads a business empire built on his success as a musician. He also set up a fashion line and a record company. Jay Z's skills and intelligences are complex and have found realization. Quite often, group pressure or other circumstances do not allow a certain intelligence to manifest and develop.

Can you give have examples of people from your surroundings who have discovered their vocation and have realized their intelligence? And of people who have not?

PRACTICAL APPLICATION

Check out the materials at: <http://www.literacynet.org/mi/home.html>

- Which of these materials can you apply in your classroom?
- Think of one activity for each different type of intelligence?
- Think of activities according to The Theory of Psychological Goals? Use the table from the Appendix. For Theory of Psychological Goals see: Chapter "Psychological Goals".

Appendix - Table for creating MI activities according to the Theory of Psychological Goals.

- Explore the Appendix for suggested activities for your students and create several ideas for games/activities which are based on the different types of intelligences.



CHAPTER

BLOOM-ANDERSON TAXONOMY

"If you are not sure where you are going you are liable to end up someplace else without even knowing it..."

Mager, 1975

The term "taxonomy" derives from the Greek word "taxis", which means system, order, arrangement, and "nomos" - law. The taxonomy is **a classification system** that helps teachers and trainers **to categorize learning activities**.

Bloom's Taxonomy was created in 1956 by a team of **psychologists** headed by Benjamin Bloom, as a method of **assessing the effectiveness of education** to help teachers, administrators, and experts developing **educational programs**, evaluators and researchers in this field.

For more than 50 years, it has been the foundation of many educational schools, and in particular of those that are more committed to **skill development** rather than to memorizing content. For teachers, it offers a curious and **practical model of formulating educational goals**. Their achievement can later be evaluated by the knowledge and the skills which **the learners demonstrate** after having passed a given **training module**. In classrooms, it can be successfully used **to choose curriculum** and **assessment methods** which help the teacher to ensure that **the material** is learnt at each of **the levels** described (see below). Here learning the material comprises not only of basic reproduction of the knowledge but also of more complex cognitive processes such as **analysis, synthesis, evaluation**, etc.

The idea of this theory is that **the goals and results** of the training **are not equal**. For example, remembering scientific facts, no matter how important they are, is at a lower level than the ability to analyze or appreciate.

The taxonomy offers **an objective classification** of the desired or expected **behaviors** of the learners (how learners will think and respond after they have completed the training) compared toward **educational goals** set.

In Bloom's initial work each educational goal can be classified at **6 different levels**, namely:

- 1. Knowledge** - the ability **to remember** and retrieve information.
- 2. Comprehension** - the ability to grasp the meaning from the material studied, which involves **transformation** of the knowledge by explaining, summarizing, interpreting ideas and concepts.
- 3. Application** - the ability to use knowledge in a new (unstudied) **context** or in a new way in order to solve a problem/task.
- 4. Analysis** -The ability **to break down** or distinguish the parts of material



into its **components** and analyze them so that its organizational structure and the relationship between the elements may be better understood.

5. **Synthesis** - Involves **reorganizing** knowledge and **putting parts together** into a coherent completely **new structure**.
6. **Evaluation** - the highest cognitive level, which includes **justification of a personal position** or **evaluation** of a situation based on well-grounded arguments.

They are **arranged hierarchically**, as Bloom's understanding is that each level includes knowledge and skills from the lower levels. For example, in order to be able to apply certain content in a new context, the student should be able to define the basic concepts and understand their meaning and nature.

OBJECTIVES OF THE TOPIC

In 2001, came out the most commonly used revised version of the Taxonomy (**Anderson and Krathwohl**) which became widely accepted in the educational circles because of its greater practicality. According to the authors, the main benefit for the teachers who know and use taxonomy is that it **sets a framework for formulating educational goals**, which helps them to be **more successful** and to achieve those goals **more easily** in their work.

After you get familiar with the topic you will be able to:

- To select and provide appropriate learning content that matches the goals;
- To use adequate evaluation methods that correspond to the goals;
- To draw up attention and achieve the learning outcomes set in your goals for the learning process;
- To use efficiently your time and resources;
- To apply the taxonomy for formulating your training goals;
- To analyze your results against the goals set;
- To use active verbs when formulating your goals;
- To select appropriate activities in order to achieve your goals at each of Taxonomy's levels;
- To distinguish and synthesize the taxonomy towards other taxonomies. To distinguish and evaluate goals for cognitive, emotional and psycho-motor skills (or evaluate and analyze different types of taxonomies - cognitive, emotional and psychomotor).

VERIFICATION OF THE UNDERSTANDING

In a group or by yourself, discuss and record the answers to the following questions and tasks:

- С какво се различават двете пирамиди – посочете разликите според вас и в какво се



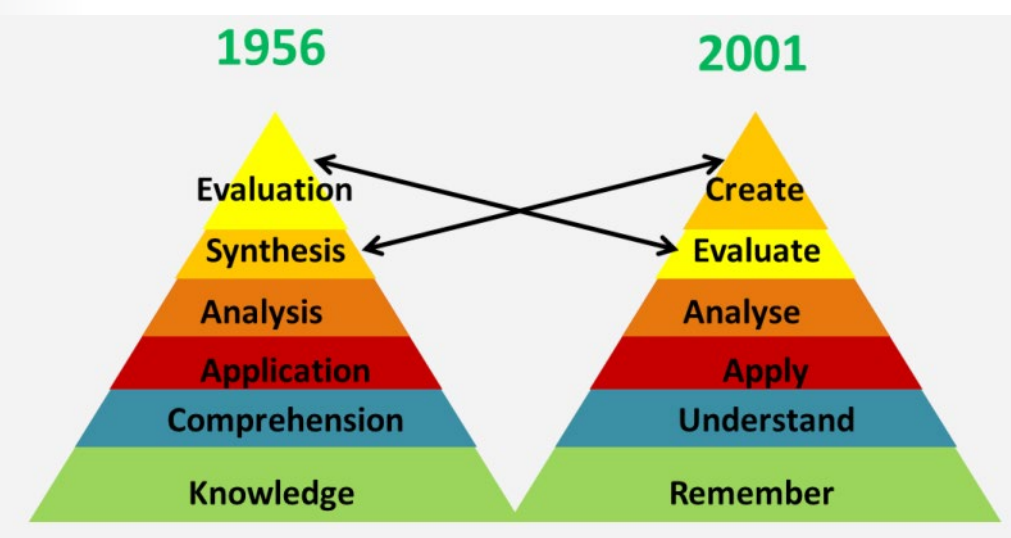
съдържат те?

- Examine the levels of the two pyramids - the Bloom's original and the Anderson- Krathwohl revision - and record the key words for you on each level.
- How do the two pyramids differ – point out the differences according to you and share what are they?
- What should the learners do at each level according to you? Give examples of what learners should do at each of the different levels?
- What will be the products - the result of the work of the learners at each level? Specify the final products at each individual level.

CONTENT INTRODUCTION

The fundamental meaning of **Bloom's taxonomy** lies in the importance that we want the learners to have **many and diverse skill levels**. Very often, teachers concentrate on achieving measurable goals related to knowledge and comprehension, and forget that learners do not master the many and **varied skills** until they are able to **apply them** or **synthesize them**. On the other hand, many teachers have difficulty in ensuring that the learners **have mastered the basic facts** and have acquired the **understanding** needed to continue toward achieving the goals of **the higher levels**. The **taxonomy** is organized from **simple to complex**; some define it as an **arrangement of goals** from trivial (**knowledge**) to more important (**synthesis, evaluation, creation**). The separate levels are suitable for **various purposes** and for learners at **varying stages** of their development.

The main difference comes from **Anderson's** proposal to exchange **the places of the last two levels**. The logic is that **creating your own product** requires more profound skills and better knowledge of the subject than just evaluating existing ideas.



Here are differences described level by level. Note that Anderson goes from



using nouns to **verbs** when describing the goals for each level. This helps further to target **the goals** to **the actions** that are expected to take place.

Taxonomy of Cognitive Domain - Comparison

Bloom’s Taxonomy 1956	Anderson and Krathwohl 2001
1. Knowledge: Remembering or retrieving previously learned material.	1. Remembering/Reproducing: Recognizing or recalling knowledge from memory. Remembering is when memory is used to produce or retrieve definitions, facts, or lists, or to recite previously learned information.
2. Comprehension: The ability to grasp or construct meaning from material.	2. Understanding: Constructing meaning from different types of functions be they written or graphic messages or activities like interpreting, exemplifying, classifying, summarizing, inferring, comparing, or explaining.
3. Application: The ability to use learned material, or to implement material in new and concrete situations.	3. Applying: Carrying out or using a procedure through executing, or implementing. It demonstrates the ability to apply the learned material to solve problems and tasks and to create products like models, presentations, interviews or simulations.
4. Analysis: The ability to break down or distinguish the parts of material into its components so that its organizational structure may be better understood.	4. Analyzing: Breaking materials or concepts into parts, determining how the parts relate to one another or how they interrelate, or how the parts relate to an overall structure or purpose.
5. Synthesis: The ability to put parts together to form a coherent or unique new whole.	5. Evaluating: Making judgments based on criteria and standards through checking and critiquing. Critiques, recommendations, and reports are some of the products that can be created to demonstrate the processes of evaluation. In the newer taxonomy, <i>evaluating</i> comes before creating as it is often a necessary part of the precursory behavior before one creates something.



6. Evaluation: The ability to judge, check, and even critique the value of material for a given purpose.	6. Creating: Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing. Creating requires users to put parts together in a new way, or synthesize parts into something new and different creating a new form or product. This process is the most difficult mental function in the new taxonomy.
---	---

(adapted from <http://thesecondprinciple.com/teaching-essentials/beyond-bloom-cognitive-taxonomy-revised/>)

Active verbs

Each **level of the taxonomy** is characterized by **certain activities** that the learners may fulfill to develop the relevant **skills**. Ideally, the aim is **to create goals** for each individual **level, formulated with active verbs** from the point of view of the learner.

The use of **active verbs** makes the goal **observable** and **measurable**. They describe **concrete behaviors** that can be seen and which prove that the student has reached **an appropriate level** of knowledge.

A common mistake that some teachers make is to describe the goals by using verbs as: **to know, to understand, to learn, to consider**, etc. These verbs, even though aimed at the learner, do not give an idea of **behavior** which **proves** that the learner has **really mastered** the material at the relevant Bloom’s level.

For example, for somebody the verb **to know** the multiplication table refers to their capability to reproduce it in a table form (Bloom’s **first level**), for others it may mean to be able to solve verbal problems that include several numerical multiplications (which would be on **the third level** of the taxonomy); for others, it will mean that the learners can think of their own situations where they can apply multiplication properly. If we simply describe the goal with the verb **to know**, we will not be able to check whether the goal was reached.

Appropriate goals for an example of studying the present simple tense in English would be:

Level 1: The learner will be able **to write** and **pronounce** correctly the present simple tense in English.

Level 3: The learner will be able to **complete** the exercises on how to use present simple tense by **filling in** missing grammar parts.

Level 6: The learner will be able to independently **make** sentences using present simple tense.



The table below presents **active verbs** used for **goal-setting** at each taxonomy **level**, as well as **activities** which can be used **to develop** and **test** these goals.

Typical verbs and activities for goal-setting at each level:

Level	Active verbs	Activities
KNOW: I reproduce information from the memory – definitions, facts, data, lists, memorized texts	Order, Define, Describe, Draw/Sketch, Find, Determine, Label, Count, Connect, Name, Cite, Remember, Repeat, Recall from memory, Show, Tell, Write	Text reading Gap-filling test Reciting definitions Giving examples Defining terms Connection task Listing task Naming task Definitions
COMPREHEND: I withdraw meaning from the learning content (interpretation, categorization, generalization, comparison, explanation)	Connect through association, Compare, Discuss, Distinguish, Differentiate from others, Calculate approximately, Explain, Express, Give examples, Label, Presume, Interpret, Say in your own words, Explain differently	Analogies Discussion board Drawing/Illustration Keeping a diary A multi-choice question test Short answer test Simple comparisons Written report Plan with bullets/subpoints



APPLY: I use learning content in a new situation or for solving a new task or a problem	Apply, Calculate precisely, Change, Sort by categories, Add, Calculate, Build, Show, Experiment, Apply, Change according to a specific target, Invent a Scenario, Predict, Present, Produce, Show, Solve (a task)	Demonstration Forecast Graphics Presentation Case studies Programming task Project Roleplay Simulation Show and tell Decision
ANALYZE: I examine the parts of the learning content separately and how they relate to each other and to the whole entity	Distinguish, Examine, Investigate, Organize, Choose, Divide, Simplify, Analyze, Break into smaller parts, Categorize, Compare, Compare the differences, Deconstruct	Survey analysis Research of a real case Comparison Conclusion /Logical output of concept Discussion Graphics Exercise with a case study Questionnaire Report Troubleshooting
EVALUATE: I use the information that I have to evaluate according to concrete criteria	Judge, Prove, Grade, Evaluate on a scale, Recommend, Choose, Support, Test, Evaluate, Challenge, Conclude, Convince, Criticize, Write a review, Defend, Point out the differences, Calculate approximately	Argumentation Research of a real case Review Debate Assessment Group discussion Project Recommendation Self-assessment Investigation Sample Case Study Statement of Values Written conclusion



CREATE: I put parts together in a new way, creating new theory, product, point of view using the cognitive skills of all previous levels	Integrate, Invent, Make, Manage, Modify, Plan, Generate, Propose, Rewrite, Assemble, Combine, Compose/Write, Create, Design, Develop, Formulate	Concept development Creating an application Experiment Formulating a plan Data collection Invention Project modification Project Proposal/Offer Problem solution Simulation
--	--	--

Three main reasons are given for the **goal setting** of trainings:

- It supports and helps the planning and **organization** of the teacher. "If you are not sure where you are going you are liable to end up someplace else without even knowing it" (Mager 1975).
- Good **formulation** of goals helps a lot at **evaluation** stage.
- Most scientists unite around the hypothesis that the development of teaching **objectives/goals** improves **learners' achievements**.

This does not mean, however, to overdo goal setting or to get stuck and frustrated in a rigid plan (Shavelson 1987). For the experienced and good teachers, it is crucial to **set** and **use goals** and **evaluation** which are **planned in advance**. (Brown, 1988; Clark & Yinger, 1986).

Most authors believe that **students** should **communicate their goals** and reach **a common agreement on them** in order to be more successful. In addition when learners are taught what they will be evaluated for, they achieve **better** results.

In NEWave in Learning, we rather use Suggestopedia and accelerated learning approaches, in which we do not focus on **goal sharing** but rather on **demonstrating** very clearly **what is expected** from the students at the end of their **creative presentation**. In this process, the goals are not so specifically and **clearly formulated**, rather the **bigger learning picture** is given to the learners. It is introduced in **its wholeness** and the **practical application** of the knowledge is shown. This creates **a context** that is extremely **important for understanding** the direction, the goals, and the knowledge that the learners are expected to acquire. Also the very important connection with **real life** is made.



GAMES AND TASKS

Task 1

Print the table (from the Annex of the chapter) and select a topic to work on (for example, irregular verbs in English). Set objectives and then check at which level of Bloom's taxonomy they belong.

Task 2

Verify that you have used active verbs. Put an active verb in your goal.

Task 3

Set different goals for different levels of Bloom's Taxonomy on a topic of your choice.

Task 4

Find information on the web of other taxonomies and analyze the difference between them and Bloom's taxonomy. Draw conclusions and discuss them with your colleagues.

Task 5

Practice writing of teaching objectives; performing task analysis; and using backwards planning to shape one chapter of your teaching subject. Develop your own matrix of behavioral content with one cognitive and one affective goal.

PRESENTATION OF THE LEARNING OUTCOMES

. Present to your colleagues, the goals and the matrix developed in the above given **Task 5**. What difficulties did you encounter while working on setting the goals? Ask your colleagues to check whether you have used active verbs and how you plan to perform your evaluation of the goals set. Present goals for different Bloom levels trying to reach one level higher than your colleagues for a chosen part of the material that you are teach. Make sure that you have set enough goals for the *knowledge* and *comprehension* levels before you proceed to the higher ones. Verify carefully if you have included application of the knowledge. If you have decided to work at *creation* level, check whether you have the appropriate goals for it.

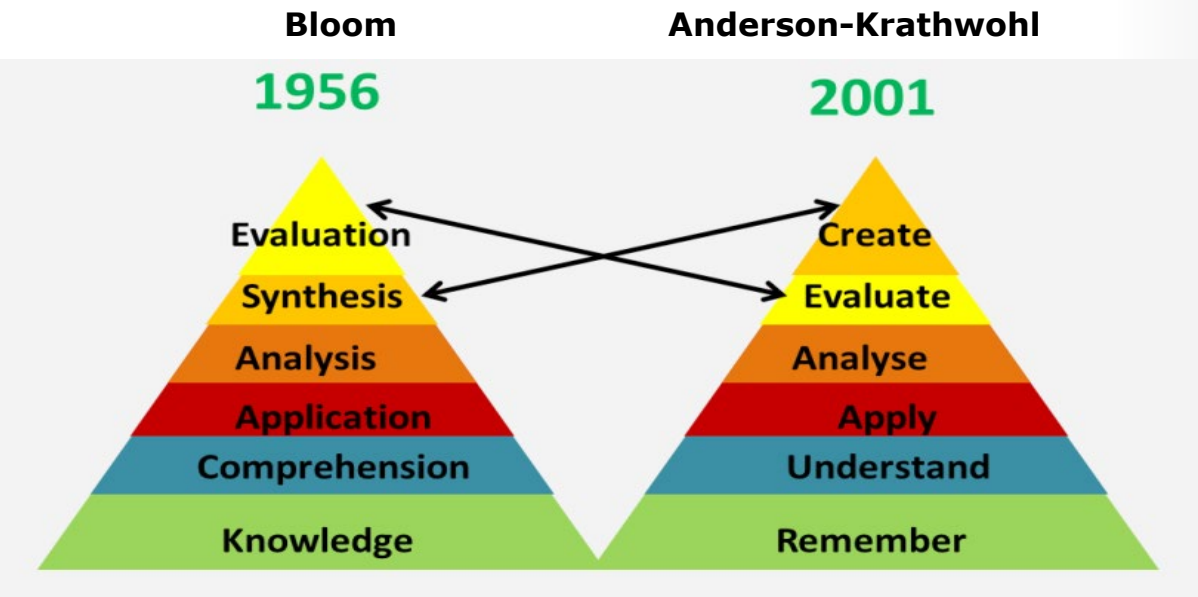
MIND MAP AND BASIC TERMINOLOGY

Examine again the two pyramids and think about their differences. Read the text below when you are ready with your answer.

The main difference comes from Anderson's proposal to change the places on **the last two levels**. The logic is that **creating your own product** requires



more profound skills and better knowledge of the subject than just evaluating existing ideas.



Have a look again at the pyramids and the mind map of Bloom's taxonomy. Check also the materials and the pictures at these links:
<http://aet-541bloomstaxonomy.wikispaces.com/Bloom%27s+Taxonomy+Mind+Map>
<http://www.usingmindmaps.com/study-skills.html>
What are the conclusions that you make from the revision of the taxonomy?

GOOD PRACTICES

The first step of most lessons and classes is setting learning goals or expected results. When planning a lesson, you should answer at least one of the following questions:

1. What will the learners know or will be able to do after the lesson? What will be the results of their learning? How will you know when and to what extent these learning goals are achieved?
2. What information, activities and experiences will you provide to the learners to help them acquire the knowledge and skills needed for reaching the learning goals? How much time do you need for this? How will you use and take advantage of the duration of your meeting with the students and the time after it? How this work, during and aside of the meetings, will help them achieve their goals?
3. What materials and additional means will you use (books, textbooks, manuals, internet-based materials)? Will you use them at work or out of it, where are they located, and are they accessible to the students? (See also Chapters: Project-Based Learning and Mixed Learning). When and how will you check the materials and give recommendations



and guidelines for your students' reactions? Are these materials appropriate for adults, their culture and the specifics of the group you work with?

4. How many different methods and techniques of teaching and learning will you use? How different techniques and methods will help you reach the higher levels and respond to the different intelligences and temperaments (Have a look at Chapters: Multiple Intelligences and Temperaments)?
5. What inclusion techniques will you use: group discussions or work in small groups, peer-to-peer learning groups, groups by interests and abilities, individual assignments? What tasks and activities will the individual groups and individual learners perform? How will you track, document and evaluate their work?

Examples of goal-setting with sample relevant tasks for development and evaluation at each level

Example 1:

Level and related activities	Objective The learner is able to...	Developmental activities	Evaluation activities
Know	Define the six levels of Bloom's taxonomy	Connect the sentences to the description of the relevant levels	Connect the given levels to its description
Comprehend	Explain the purpose of Bloom's taxonomy	Put goals set in advance into categories according to Bloom's levels	Of all listed goals choose the ones relevant to the Analysis level
Apply	Set learning goals for each of Bloom's levels	Set learning goals for a given topic for each of Bloom's levels	Set learning goals for each of Bloom's levels for a lesson that you plan



Analyze	Find similarities and differences between the goals set for the different levels and between goals set for one level on different topics	You have 4 goals prepared in advance. Please select which one refers to which level. How did you guess?	Exchange the goals that you have prepared in the previous task with your colleagues from the other group. Define the level to which each goal that you got from them corresponds. How did you guess?
Evaluate	Evaluate the effectiveness of setting studying goals using Bloom's taxonomy	For the purpose of the previous task, would you reformulate some of them and if yes - why? How did you choose them? Justify your answer.	For the purpose of the previous task, would you reformulate some of them and if yes - why? How did you choose them? Justify your answer.
Create	Create a study plan which includes all comprehension levels of Bloom's taxonomy	Define goals according to Bloom for each chapter of your handbook	Combine the goals for at least two different topics with a colleague. How can you measure with one task goals for different levels or for different subjects? Justify your answer.

PRACTICAL APPLICATION

Think about how you would apply in your future work the contents covered in this topic. Share it with your colleagues and team. Can you join efforts to plan and set goals for the next programmes and trainings that you will prepare?

Think of your own example of a topic on which you want to work.



CHAPTER

The Importance of Rhythm

„The education itself is a sacrament, and the schooling is an art“

Rudolf Steiner

OBJECTIVES OF THE TOPIC

Once you get familiar with the topic you will be able to:

- Describe the different effects for a person from applying or not applying rhythm.
- Describe and distinguish the importance of rhythm in teaching.
- Share ideas for administering rhythm in your own practice.
- Apply the theory of rhythm in your work.
- Analyze the importance of rhythm for your successful teaching work.
- Create and use your own rhythm to work with your students, based on the rhythm theory.

VERIFICATION OF THE UNDERSTANDING

In a group or stand alone, discuss and record the answers to the following questions and tasks:

- Please describe what is a rhythm in education with a series of keywords?
- When and how you used to teach with that kind of rhythm? How did your work look like a structure? What were the results of its implementation?
- How goes your daily rhythm work with learners, weekly, monthly, annual? Please try to specify the basic characteristics for each individual rhythm.

CONTENT INTRODUCTION

There are rhythms everywhere. We can find them everywhere - in the nature and in people as well. In the people: while breathing we see inhalation-exhalation, also the heart rhythm (systole-diastole), the condition of alertness-sleep. In the nature: the change of day and night, seasons, sea tides. Processes in the universe and processes in people are directly related. The more people are in synchronization with the natural rhythms, the better is their condition-physical and mental. Each rhythm has an impact on certain healthy processes inside of



the human beings and it is important to know and understand these processes. Knowing the basic rhythms and the change in the state of people, we can better plan our activities, choose the most appropriate time and activity. What's even more - we can become more observant about the changes in the world and the people around us so that we can easily identify what, who and whom to assign tasks.

We will look at some **basic rhythms** that occur both in **nature** and **humans**, and certainly they can help us in our everyday life. The overall **physical and mental state** of people is influenced by **natural rhythms** and e.g. this is particularly noticeable in the process of **changing seasons**. Moreover, our health condition directly depends on whether we are in tune with the on-going changes. The reason is that no matter how independent a person is, his **body** exists according to the **laws of the surrounding world**, where everything is rhythmic and requires the active period to change with rest; after the day the night comes, after the spring of this summer, and so on.

Annual rhythm

With the change in nature during the **annual cycle**, the person also changes. Here is what happens during the calendar year. Overall, this period can be compared to breathing, which has 4 phases:

In-Breathing	Detention	Out-Breathing	Detention
Winter	Spring	Summer	Autumn

The **expiration** (Out-Breathing) phase is the **summer**. Here the Earth is open to the cosmos and is radiating to it. A great image of this process is the vigorous growth of plants upwards. Everything that has been dormant under the ground like seed and bulb, rises, blooms and binds. The human being is **asynchronous process** - the person is **spiritually open-minded, deconcentrated, soul-floating** in the world. The next phase - the **detention** - corresponds to **autumn**. Here we have a gradual transition from summer openness to winter closure. This is a **transitional period** necessary for the smooth running of processes, as the sudden change without transition is not healthy for the plant and animal world, nor for humans. In autumn, a man harvested the last crop. There are still leaves on the trees, but they are yellowing, they dry out and lightly fall down. At the same time, the change in the humans is happening - they slowly and slowly **close**, though not completely, their **attention** is focused on **preparing for the winter**, gathering everything they will need then. We reach the **winter** to the greatest **enclosure** of earth and men. But this is the most productive agricultural period because now the land runs hard transformation of substances, their transformation. As it is closed and not radiating the earth now, it is also the most receptive, the impacts on it are greatest. **People are also closest in winter**. There is an **intense processing**, there is a **soul transformation**. Obviously passive, this period is the period of



the most **active accumulation** of internal forces, **mobilization**, maturation of processes. People are **the most concentrated and capable of intellectual activity** in the winter. Next **spring** is the **transition** between winter recession and summer openness. People are gradually preparing to give, to radiate outdoors, which can be remarkable again - imagine the farmer who sows seeds, throws them to the ground. But **the human being is a free being**. And because of the same reason, people can not ignore the natural rhythm. For example, if in the autumn it does not go through the necessary process of gradual closure and it enters the winter that way, or when spring is required to start a process of gradual opening, and it is still spiritually closed, completely concentrated within itself without relaxation, a number of unpleasant symptoms can be observed. Frequently spring fatigue is a delayed transition process where vitamins and minerals do not help, as the cause is not in their absence. Symptoms of unexplained fatigue and exhaustion, depression, nervousness, headache, low or high blood pressure can sometimes also be due to **asynchronous behavior** of man to the **natural rhythms**. This cardinal change over the course of a year implies **organizing the activity** in a different way, most appropriate for the season. For example, during the **summer** is the most healthy to **stay in the wild nature**, to do agricultural activities, trips, picnics, observation in nature, open-air plein air, herb gathering, etc. **The autumn transition** is particularly well done if there are any activities like **ritual**, for example, such as autumn cleaning, winter preparation, summer clothes removal and winter extraction. Rehabilitation activities, collecting materials for work in the winter, drying and packaging of herbs and crops, preparation of herbarium are appropriate. In **winter**, it is especially good to create a **feeling of cozy, enclosed space**. In the fall can be sewn pillows, or beware of the tide under doors and windows. Winter activities are suitable for all **kinds of crafts** related to **various crafts**, especially sewing, knitting, working with clay, etc. **Planning** the upcoming **activities** in the coming season is good to do again in the winter - then the chance to miss something is smaller. In **spring** we must see the **transition** between winter and summer again. The ritual of spring cleaning is repeated. Also the first **preparatory activities** in the garden, more time out. In ancient times, people have had an understanding of this natural rhythm, so everywhere, in all civilizations and cultures, there are calendar holidays celebrating the beginning of one season and thus preparing a person for the change in nature and in itself. In Bulgaria, these are the holidays Enyovden (preparation and meeting of the summer), St. Mihail's Day (preparation and meeting of autumn), Christmas (winter preparation and welcoming), Easter (preparation and welcoming of the spring). Full participation in the preparation and running of these seasonal holidays has ensured the proper personalization of the person. Nowadays, when holidays are not celebrated or when they are celebrated only formally and without pre-training, they often fail to play their part. Man is increasingly **asynchronous** with the **natural rhythm**, and this always leads to physical symptoms.



Based on the theory outlined above, for the purposes of this paper, it is important to summarize the following:

- When **training** is in the form of **a course**, it is important to choose the **period of the year** when it is **to be conducted** in order to be able to gain the most efficiency from it.
- It is important for the **teacher to know folk traditions** and to integrate knowledge into the learning process in different, interesting ways in order to give learners knowledge that will connect them to the **natural rhythm**.
- When it comes to multicultural environment, it is very appropriate to compare these traditions and folk customs.

Monthly rhythm

The next rhythm that we should take into account is the **monthly** one. Nowadays it is not well visible anywhere. In Waldorf schools, the entire organization of subject training depends on the monthly rhythm (For more information, see the „Practical Application“ section in this topic). Below we will show what each rhythm effects - annual, monthly, weekly and daily. Another option to make the monthly rhythm visible is, for example, the organization of „Month of ..“ (a month of friendship, a month of herbs, a month of trips, etc.). Also a good option is if a morning round is organized, where the rhythmic exercises in it are the same throughout the month, then part of them will change.

Weekly rhythm

Unlike the monthly one, **the weekly rhythm** is quite noticeable, especially during school time - it is achieved by alternating school (5) and non-academic (2) days. But even during holidays, this rhythm must be sustained by this alternation, and on Saturdays and Sundays, everyday life is built differently, for example, a later rise, lack of workshops, joint or group activities not performed during weekdays (excursions, trips, cinema, theater, etc.). In addition, there is one more thing to know about the specifics of the individual days confirmed by chronomedicine (the medical research department of biological rhythms):

- **Monday** is the first day of the week, a day that is related to the past week, and on the other hand - the day which opens the door to the new one. It is best to have **a special moment** on Monday (**for example, a weekly round**) in which anyone wishing to say something can be heard. Often here the statements are related, both with the upcoming and past experiences, they are a bridge between the past and the future. It is good to hear the one who wants to share some past experience, to be able to part with him in a healthy way and to manage the future, anticipated events. It is good to have more than one person on the part of the trainers, or in the other case, if the trainer is one, to share the important moments with his colleagues in order to be aware of some tendencies, expectations, intentions of the trainees. Nothing that is said in such a circle should serve as a reason for mockery and should not be misused, otherwise the confidence is getting lost, and that is devastating.

- **Tuesday and Wednesday** are ideal days for learning, because the



concentration is good (note that the degree of concentration still depends on the annual rhythm). **Tuesday** is more focused on **novelties**, and **Wednesday** - on **research projects**, especially in teams.

- **Thursday** was found to be a day that requires **relaxation**, exhalation. If there are any celebrations that are not strictly fixed in the calendar (for example birthdays of those born during the week, etc.), it is good to choose Thursday. If there are any classes, it is good **to finish by noon** if possible.

- **Friday** is again a **day of concentration and learning**, but it is not the scientific interest in it. Here one is most focused on projects **related to art** as a bridge to weekends. Whatever activities are on Friday, they are somehow good to be related to creativity.

- **Saturday and Sunday** carry a different charge. They are the necessary **relaxation** and, as discussed above, they need a different rhythm. It is desirable to have the cleaning done on a Saturday and not to cover the whole day.

Daily rhythm

It is also the order of the daily organization. In fact, we often say **a daily rhythm**, but it is a 24-hour clock. Only then - in the alternation of day and night - there is integrity. Here is an important shift in **wakefulness and sleep**. As it is known, in chronic dyspnea the working capacity decreases, the concentration and the memory also. It is difficult to form habits to go to bed at approximately the same time. One compromise option is to accept a different sleep and retirement regime during weekdays and weekends. What about daytime rhythm should be taken into account when setting up the exercises?

- Between **8:00 and 13:00** **the mental activity is most active**, while between **13:00 and 15:00** **there is a downturn**, and a person needs rest or more creative activities, not requiring excessive mental effort. After 15.00, the activity is restored.

- Additionally, approximately **every four hours occurs intensified drowsiness**. It's best to be used by people who have difficulty falling asleep, to take into account the onset of this rhythm and to lie down at the peak of the coming drowsiness and relaxation.

- Every hour and a half there is a **phase of weakening** (we call it exhale) - after an hour and a half of tense work or work, we need more complete rest. **The rest** is required to be full and **at least 20-30 minutes long**.

In one, a rhythm is related to certain processes in the human beings.

The annual rhythm has got a key importance in:

- Changing the environment and getting used to the new environment;
- For a serious illness followed by a recovery (one year is the full recovery);



- The more adequately we follow the annual rhythm, the healthier we are physically.

The monthly rhythm is particularly important for:

- The overall vitality of the organism;
- The good memory functions;
- Moderating the expression of temperament without getting to the extreme.

The weekly rhythm is responsible for:

- Mastery of emotional-sensual life;
- The good mental state;
- Finding sufficient strength to communicate and socialize.

The day (daytime) rhythm is connected to:

- The good condition of our self, which is suppressed and weakened, especially in the case of insufficient sleep;
- Finding forces to be motivated and proactive.

By rhythmically organizing our life, we act on many levels on the whole person. This is especially important for the formation of a healthy personality and for his successful orientation.

GAMES AND TASKS

Task 1

Make a weekly rhythm to work with your band. Think of what they could be your daily work rate, monthlyments, annualtons.

Task 2

According to the part of the day you teach a student, think about the rhythm of your work and how you will work for the emotional state of the students in the rhythm.

Task 3

How much is material you teach influenced by the days of the week? Think and share what activities you will have on different days of the week? Describe them and discuss them with your colleagues.



PRESENTATION OF THE LEARNING OUTCOMES

Imagine your classmates, the weekly rhythm of the classes and the monthly rhythm of an entire course. If you can, make an annual rhythm of your work and present it to your colleagues, according to the theory of rhythm in teaching. Write your feedback carefully and try to develop your rhythm of working with the students.

GOOD PRACTICES

In Waldorf schools, the whole organization of subject training depends on the monthly rhythm. There is always one main subject there, which is for 4 weeks. In parallel, others are taught, but it is most accented and studied most intensely. After 4 weeks, it switches to another main subject and so throughout the school year. Thus, the monthly rhythm is visible and influential on the children. How our daily lives can become influential: for example, through one-time activities, for example every third Thursday or every second Wednesday, etc.

PRACTICAL APPLICATION

Make your own rhythm of work and personal life. Try to match it to every rhythm - annual, monthly, weekly and daily. Make a plan of activities to follow throughout the year to be in harmony with natural rhythms. When you are ready, you will comply with this plan with your pedagogical work. Are there similarities and differences with your rhythm of working with your students? How can you combine and synchronize your rhythm with life and work with natural rhythm so that they are in harmony and synchronicity? Describe your results. If you want you can share it with us: suggestopediainstitute@gmail.com



Model of fast and
effective learning



CHAPTER BLENDED LEARNING

"Blended learning is learning that is facilitated by the effective combination of different modes of delivery, models of teaching and styles of learning, and founded on transparent communication amongst all parties involved with a course"

Heinze and Procter



OBJECTIVES OF THE TOPIC

After you get familiar with the topic you will be able to:

- To identify and describe the characteristics of blended learning;
- To apply the theory of blended learning when preparing training sessions and programs;
- To distinguish and analyze blended learning towards other learning theories;
- To evaluate the results of applying blended learning.

VERIFICATION OF THE UNDERSTANDING

In a group or by yourself discuss and record the answers to the following questions and tasks:

- Make your own mind map using basic terms which describe what is blended learning for you;
- What are the similarities and the differences between online training and face-to-face training in your opinion? Describe both types using keywords. Decide which of those keywords are applicable also for the blended learning?

CONTENT INTRODUCTION

Blended learning is a relatively new learning methodology. It is a **system of learning and teaching** that combines **the inspiration** and **motivation** of traditional teaching in classrooms and **the fun** and **flexibility** of **e-learning** (also called **online** or distance learning). It is used for creation of courses that are **accessible** and **motivating** for modern **adult learners**. **The amount** of hours spent in the classroom and those spent online **varies** in the different courses and themes. Studies aim to find the best ratio between them.

There are many definitions and versions of blended learning, which is also described as **“hybrid learning”**, **“technology-driven learning”**, **“internet-supported learning”** and **“mixed learning”**. Powell et al. (2015) state clearly that **“blended learning** combines **the best features** of **online** learning and **face-to-face** schooling. **In future**, it may become a **predominant model** which is encountered more often than each of them individually”. In general, the term is used **to designate a training** that can be **adapted** to the **needs** of each learner and is not limited by location or strict rules. The Innosite Institute has adopted a common definition that could be found in many relevant research sources. Therefore, Staker’s research (2011), defines blended learning



as **“any time** when a student **learns** at least in part through **online learning**, with some element of student control over time, place, path, and/or pace; at least in part in a supervised brick-and-mortar location away from home”. This definition includes **two key aspects** that distinguish this way of learning from the traditional teaching and learning in the common learning environment or other physical learning environments. Firstly, the student must **study “supervised** in a brick-and-mortar location away from home” for at least part of his time. Second, in order for the learning to be considered as “blended”, the learner **should participate in an online** training with some element **of control** over time, place, path, and/or pace. **The element of student control** is essential for the definition as it distinguishes online learning from other forms of **technology-based learning** such as when a teacher uses a laptop or projector to show **online materials** or teaching aids to the students in the classroom, or uses **an electronic white board** to animate the direct teaching. For this reason, the above given definition of blended learning is considered from the point of view of the student (Stacker, ibid.).

Eryilmaz (2015) describes the differences between face-to-face and online learning using **12 parameters** presented in the table below. They show that, in general, online training provides learning which is **more flexible** and **student-centered**.

Parameters	Face-to-face	Online training
Focus of course	Group	Group or individual
Focus of content	Teacher-centered	Student-centered
Form	Synchronous	Asynchronous
Time	Scheduled	Anytime
Place	Classroom	Anywhere
Flexibility	Standardized	Customized
Content	Stable, durable	Stable, dynamic, transitory
Number of students	Space delimited	Unlimited
Instructor preparation	Some (transparencies)	Extensive pre-preparation

Distribution of materials	Hard copy	Electronic download
Interactivity	Spontaneous	Structured
Range of interactivity	Full interactivity	Limited interactivity

Differences between face-to-face and online learning environments (Eryilmaz, 2015)

Moreover, he further distinguishes between the “**conventional**” **online-learning** and **blended learning** and identifies **a number of advantages** of the **blended learning** from the point of view of **student-teacher interaction** and the learner’s readiness for **the new knowledge** before attending the course, which can respectively contribute to increased**effectiveness of the training**. The main reason for this is that **blended learning**uses Internet and **the available resources as a preparatory tool** both for the teachers and the learners. In **the traditional classroom**, the students come and listen to the lesson and then **write their homework**. Conversely, in **blended training**, the students have already **received the information**for the lesson (videos, texts, other multimedia materials) before entering the class and therefore, are**better prepared** to reinforce the process of the course. Likewise, the teacher **uses** the classroom **to create an environment** for reflexion where student can **think about** what they have learned and **clarify elements** that are not understood. This condition creates **opportunities** and provides **more time for interaction** in classroom and in other practical activities. There is also **a shift in the role of the teacher** and a change in the **relationship with the learners**: the teacher acts as a **mentor/assistant** and the students can be more active than in the face-to-face education. In his study Eryilmaz also highlights the issue of **student control**in blended learning and its **importance** for ensuring effectiveness of the learning. He outlines a set of **features** that enable the learner **to choose** how and when to use the online materials (for example, how many times to watch a video), and can therefore contribute to **a deeper** and more profound understanding of the topic.

Blended learning models

With the advancement of **technologies** and **pedagogy** different models of blended learning are currently being used and **new versions**are being developed. These models vary in **someof their dimensions** which includ**teachers’ roles, schedules, physical space** and **teaching methods**. In most sources, the used models are grouped in **six clusters**, each of them being characterized by its **project elements** that distinguish it from others (Staker, 2011).

Face-to-face driver model:

It is considered to be the closest to the typical **school structure**. In this approach, **online training** is introduced on a case-by-case basis, which means that only some students from a given course will participate in some form of **blended learning**. In **the face-to-face driver** approach, learners who **make more effort** or work above the level of their course can advance at their own pace and **use technologies** in the class room. This model is found **to be effective for teaching languages**.

Rotation Model:

Students **rotate** on **a fixed schedule** between **learning modalities**, and work**online** or **face-to-face** with the teacher. There are also **variations** of the **rotation model** related to various aspects, such as time, individual or group rotation, etc.

Flex Model

In this approach the materials are provided **mainly online**. Although **there are teachers** in the classroom to provide on-site assistance **if such is needed**, the training is mostly **self-directed** as learners **learn independently**and practice new concepts in **digital environment**.

Online Lab Model

With this model, students learn **fully online** but travel to a dedicated **computer lab** to complete their final papers. The lab is **supervised by adults**, but they are not **qualified teachers**. This allows the students to work **at pace** and **in area** that **are suitable for them** without affecting **the learning environment** of other learners.

Self-blend Model

Self-blended learning combines **attended training** with **online training**. This model enables learners **to take classes** beyond the ones that are already available in their course. Although these students visit a traditional environment, they also choose **to complement** their training through **online courses** offered remotely. This **blended learning** method can be **successful** if the learners themselves are **highly motivated**. Self-blending is mostly suitable for students who wish to attend **additional advanced courses** or who are interested in an area not covered by the traditional curriculum.

Online Driver Model

In comparisson to the face-to-face driver model, the online driver model is at the other end of the spectrum, as it is a form of **blended learning**in which learners work **remotely** and **the materials** are mostly delivered through **an online platform**. Although there are **optional attendance registrations**, students can usually talk to their teachers online if they have any questions. This model of **blended learning** is ideal for learners who **need** more **flexibility** and **au-**



tonomy in their daily schedules.

Carman (2005) identifies **5 key ingredients** that are needed for delivering a **successful blended learning course**:

1. **Live seminars**;
2. Online **content** available for learning at one's **own pace**;
3. **Collaboration** (between the students and between the student and the mentor;
4. **Assessment**;
5. **Reference materials** for further **reflection** on what has been learned.

The blended learning environment has 6 different models: **face-to-face training, rotation, flexibility, online lab, independent learning** of mixed type and **online learning**. Specialists also add that "blended learning refers to any moment in which **the learner learns**, whether online or offline, and **controls the time, the place, the way and the pace on his own**."

These six models should serve as clay for modeling. A single **blended training** should be left to take a **specific form** - it must be able **to respond to the environment** in which it is used, to **the technological changes** and to **the needs of learners**.

Pedagogical principles

Therefore, the important points for a teacher when **designing a blended learning model** is to determine not only how much **online training** to use in combination with the **face-to-face** training but also the general pedagogical principles on which it will be based.

In view of the above, the following aspects should be taken into account for **blended training models**:

- increasing **the interest/motivation** of the students;
- creating opportunities for **cooperation** between the students and the teacher;
- learners have an **active contribution** to the knowledge;
- learners **reflect** on what they have learned - **self-assessment**;
- improvement of **critical thinking**;
- improvement of **the digital skills** of the students;
- **networking** with other teaching and educational organizations - **sharing of content**.

In fact, the blended learning models make possible **the use of a number of practices** that help in achieving the goals of **the learner-centered approach**, such as **group work, attended training** with content generated by the student groups, **attended training** in a classroom, followed by **self-generation of on-line content** by the students.



All these are examples of how to enable students **to learn independently**, take the initiative, **and participate in the design** of the **learning environment**, which is an essential part of the upgrade of Suggestopedia. They **are not passive participants** in a controlled process but are **active creators** who connect and extend their training beyond the capacity of the teacher. This interaction allows the content to be **developed in depth** and creates possibilities to go beyond the set goals or competences.

Many of these inductive methods also use cooperative learning where learners achieve a lot through **group work** both during the scheduled time spent in class and out of it. Similarly, **entrepreneurship** and entrepreneurial education are very important when working with marginalized groups. Omolayo Olajide and James (2011) clearly state that these **competences** (including, for example, the ability to plan, organize, manage, lead and delegate, analyze, take risks, etc.) are closely related and can be best developed on the basis of a **research model**.

This approach also implies that when promoting innovative learning it is important to take into account the needs of each **learning environment**, classroom and student instead of adopting a unified approach to all. To this end, the blended learning model should include elements of **self-assessment** and educational design to avoid situations in which the teacher **simply "teaches"** a certain curriculum rather than designs and **adapts** the available **learning materials to the profile** of their students. At the same time, we have to keep in mind that not all teachers are prepared or **trained** to design education and **make adjustments** to the material. In this case, it is important to enable the exchange of **practices** among teachers through an online network so that they can share ideas, experiences and ways to adapt the curriculum and the lessons to different contexts in the classroom. For this, within the framework of the project and the methodology of "NEWave in Learning", we pay special attention to the exchange of information and the creation of **an online platform** where such **exchange and communication** takes place.

GAMES AND TASKS

Task 1

Take a look at Eryilmaz's table and classification (2015) above showing the differences between the learning environments face-to-face and online. What are the pros and cons of each parameter in your opinion?

Task 2

Choose a topic from the material that you teach and write a short plan on how you would organize the learning on this topic using blended learning.



PRESENTATION OF THE LEARNING OUTCOMES

Take a look at the three following components and think about what will be the characteristics of a blended learning process organized by you? Give concrete examples of the theory we introduced which you use in your practice. Divide your model into three main components: online learning, supervising learners, and learning in a traditional classroom.

Component No.1: Online Delivery

The communication of any mixed training is carried out through one of the online learning platforms available on the market. Such platforms facilitate greatly content delivery, process management and asynchronous learning. Whichever platform you choose, do not be afraid to experiment with it. On the contrary –do it! Change and constantly update its form and content. This will undoubtedly ensure its up-to-date relevance.

Most of them also have free versions. Of course, their functionalities are quite limited, but still they are a good starting point to establish an online connection with your students. In addition, you can also use one of the available online assessment tools, such as Juno or Google Forms. They offer numerous ways to collect and analyze information.

Component No.2: Student Control

In order for your blended training to be successful, you should look at your students as democratic participants in their own development, to whom you need to present in advance the terms of the public contract and the expected results. Only after that, you can start working on the project contents. Also you should not forget that being in control is a privilege, not a right. You should also keep in mind that your students will need some time to get used to their new status quo and to start taking responsibility for their own training.

Component No. 3: Learning in a traditional classroom

The best way to have traditional classroom training is to decentralize it. Imagine a classroom in which students are broken up into four groups. One group of four to six students is actively working on research/homework, chatting occasionally but largely on task. The second group is peer-editing one another's essays. The third group is at a whiteboard drawing a graphic depicting the change in technology and strategies between World War I and World War II. The final group is seated around a small table with the teacher, discussing the unit's essential questions and devising new ones. In such way, a 100% commitment is ensured of all who are present in the classroom and cannot "escape" the mind flow.

The teaching approach of the traditional classrooms should change. Teachers' role should be more of mentors who guide their students not towards mas-



tering 100% of the learning content but towards building a democratic society. Of course, the students will also need guidance in performing this group task.

In conclusion, we would like to give you one last piece of advice: Always take pictures or videos of what is happening in the classroom, and when possible share your work online. People, basically, are suspicious of the things that are not familiar to them. Show to yourself and to the others what blended education is and its benefits will reveal itself naturally.

Source: http://www.edweek.org/tm/articles/2014/10/08/ctq_tolley_blended_learning.html.

GOOD PRACTICES

Check out the information on GREENT project website at <https://greentproject.eu/>. What do you notice? Do you find the characteristics of blended learning? Analyze the separate components and assess whether the model can be applied in your organization.

PRACTICAL APPLICATION

After examining the GREENT model which incorporates blended learning, think about and point out how you can apply the blended learning model in your practice.³



Project-Based Learning and Problem-Based Learning

"The time is always right to do what is right."

Martin Luther King

OBJECTIVES OF THE TOPIC

After you get familiar with the topic you will be able to:

- To define and describe the process and the stages of project-based training. To distinguish the different stages and their characteristics and your role in the process;
- To distinguish and analyze project-based learning towards other similar models, such as problem-based learning;
- To apply the steps of project-based learning process to create a project on which to work with your students;
- To formulate objectives for a process based on project-based learning;
- To formulate a good principal question and to evaluate it according to a scale of criteria;
- To understand and evaluate your role as a teacher when working with learners;
- To analyze the opportunities for implementing the process in your work.

VERIFICATION OF THE UNDERSTANDING

In a group or by yourself discuss and record the answers to the following questions and tasks:

- Watch the video and discuss your understanding of what is project-based learning. Visualize your work.

<https://www.youtube.com/watch?v=Z1O3mV-bvwU&t=31s>

(Translated into Bulgarian with the kind support of Tempo Foundation)

- How do you define and understand what is to work on projects with your students? Visualize your work.

CONTENT INTRODUCTION

The system for fast and effective learning "NEWave in Learning" includes **project-based training** because of its place and role for developing and activating **the information taught** and **the learning contents**. **Project-based training** can also be a supportive additional activity (for example to a foreign language course or other training), especially when learning has to be trans-



ferred to **real environment** or linked to **real life**. In such way the students immerse in real environment and through **the context** they can link the learning to **real situations** in which **to apply** the acquired competencies.

The term "**project**", appeared for first time at the end of the 19th and early 20th century when it entered the terminology of **business** and **social activities**. It still does not have **an exact** and clearly constructed **definition**. Training is defined as project-based when it fulfills certain **characteristics**.

Project and problem-oriented learning are some of the most effective methods to achieve important contemporary **educational goals** - active learning, linking learning content to **people's practice**, learning in **the context of life**, and learning through **collaboration**. Students engage in an **authentic task** and receive real-time help, advice and correction by the trainer. These methods stimulate the development of **cognitive** and **meta-cognitive** skills that are important to the society and the individual: transfer of the learning to new situations, creative thinking, critical thinking, activity planning, performance analysis, reflection.

Problem-oriented learning was introduced for the first time in 1969 by Howard Barrows and his colleagues from the Medical Faculty of McMaster University in Canada to bring the training of medical professionals closer to the situations of **the real life**. Since then it has been used for the training of professionals from many various fields. It is **a pedagogical strategy** for **active learning**, and it is a kind of **learner-centered** pedagogy where students learn about a subject or topic **in the context** of complex, multifaceted and **real problems**.

The method organizes **all learning activities** around **the problem brought forward**.

Some of the distinguishing features of problem-oriented learning are:

- It is performed through **challenging problems** which do not have any set preconditions;
- The learners work in **small groups**, typically of 6-10 people;
- **The teacher** only **supports** the training.

The **problem brought forward** is the main instrument for acquiring **problem solving skills** and stimulation of **the cognitive processes** of the learners. Problems are **discussed**, what is known **is defined**, **hypotheses are generated**, **educational goals** are set, and further activities are organized (such as **research** and information gathering from different sources). The cycle of problem-oriented learning finishes with **a comment on the learning process**, problem solution and team work. The role of the teachers is **to guide the learning process**, not to provide knowledge. They only assist the learners by asking **open questions**, which are, to a great extent, **meta-cognitive**.



According to G. Hegedüs project-oriented training in natural sciences, is "...the creativity, the model, the modeling and the project which form an entity. **The creativity is the aim** and the solution ;the model and the modeling - the function and the form of the learning, while the project is the framework of how learning is organized. "

Some of the main characteristics of the project-based learning include:

- **Motivating questions** which help to organize and guide training;
- **Active research**, which is planned and conducted completely independently by the students;
- **Autonomy** of the trainees, which turns them into organizers and managers of their own training;
- **Collaboration** between learners, teachers and members of the public when addressing common problems and issues;
- **Project authenticity** based on existing, real-life issues, applicable out of the class room;
- **Real products** and **their presentation**, which are the material result of the project and demonstrate what was learned.

Project-based learning is widely used in modern teaching and pedagogy because of the numerous advantages it offers. Its connection to **real life situations** and **issues**, the research and its ability to solve **specific** and current **issues** and situations provide the learners with opportunities for **professional realization**. Through projects, learners create specific products working as a team, assigning tasks, and conducting **in-depth, real-life research**. This is one of the reasons why projects are positioned at the highest level of Bloom-Anderson Taxonomy (For more information, see Chapter: **Bloom's Taxonomy**).

Undoubtedly, project-based learning achieves important goals of modern pedagogy which are linked to:

- Establishing connection between **the content** and **real life** and **practice**, providing **a real context** of the learning;
- Collaborative and **team interaction** and learning, through **cooperation** between learners;
- Acquisition of **significant competences** needed for **professional realization**, such as communication and presentation skills, learning skills, goal-setting skills, planning, etc.
- The trainee is **responsible** and **actively involved** in their own learning and in the process of acquiring knowledge and skills;
- A connection between **the professionals** and **the local community** with the trainees and learners.

Projects can be used for both learning and **self-learning**, being **highly effective** in acquiring **specific knowledge** and **skills**. In pedagogical theory education through projects is associated with **the constructivist models**



of teaching. In modern pedagogy, many important processes and models of **self-directed**, **self-regulated** and **transformational** learning are associated with project learning.

Project-based learning enables learners **to engage** in the learning process and to become **active participants** in its **design** and implementation. Throughout the process, they also develop valuable **life** and **professional skills**, mainly **teamwork**, communication and **cooperation**, **goal-setting** and planning, as well as **presentation** and other skills.

Projects are a great opportunity for **real** and challenging **experiences** that give us valuable **cognitive**, **social** and **personal** knowledge and skills. These features make them one of the most preferred working tools. Many training organizations and institutions organize their work through projects.

According to Ms. Gergana Shopova (*Project-Based Teaching of Chemistry and Environmental Protection: Innovative Aspects*), project-based learning passes through the following stages:

1. **Exploratory - research** of a problem and formulation of a topic of the project;
2. **Analytical-analysis** of the situation and the information available and implementation planning.
3. **Practical - realization** of project concept and activities;
4. **Presentation - presentation** of project's products;
5. **Control - evaluation** of the products and the work of the students.

Some of the main features of project training are:

- **Driving questions** that serve to organize and guide the training;
- **Active research**, which is planned and conducted by the students completely independently;
- **Autonomy** of students, which makes them the organizers and managers of their own training;
- **Collaboration** between students, teachers and members of the society when solving common problems and issues;
- **Authenticity** of the projects, based on real life problems, applicability out of the classroom;
- **The real products (artifacts)** and their **presentation** - they represent the material outcomes of the project and demonstrate what was learnt.

Each project has the following **main characteristics**:

- **Duration** in time;
- **Stages** (phases) of the activity;
- Integration of knowledge and skills from **more than one field** in a **variety of appropriate activities** (oral, written, practical);



- **Teamwork**, which implies the development of certain qualities and skills –unassisted planning and organization of the activities of the group;
- The existence of a **practical** or spiritual **benefit** from the project outcome that can be seen, read, experienced, etc.

Projects can be classified by various parameters:

1. By project's **predominant activity**: research, creative, role-oriented, practical, cognitive, etc.;
2. By **subject-domain field**: mono-project (one subject), interdisciplinary;
3. By the nature of **coordination of the project**: direct, with open and clear coordination (one of the students has the role of a coordinator) or with hidden coordination (by a teacher or someone else who is not directly involved in the team's work);
4. By **nature of the contacts** (students from one group, from one organization, from a city, region, country or from different countries);
5. By **number of participants** - individual, team (small groups) or collective (a whole course or larger group).
6. By **duration of implementation**- short-term (1-2 hours), mid-term (from a week to a month), long-term (several months).
7. By **topic**: economic, linguistic, geographical, mathematical, historical, ecological, health, etc.
8. By **examined contradictions**: social, scientific, cultural, political, historical, integral, religious, etc.
9. By **practical** significance: local, regional, national, international.

Project **evaluation** is a complex and difficult task because requires assessment not only of the acquired knowledge but also of the different **social and personal skills**. Objective enough criteria have to be set to ensure standards without restricting the creative freedom of the students.

Some main requirements and **evaluation criteria** of the projects are:

- **Importance and actuality** of the problem and relevance to the curriculum;
- **Active participation** of each participant, according to their individual abilities;
- **Collective** character of the decisions taken, communication and teamwork;
- Use of **integrated knowledge and skills** from other subject or scientific fields;
- **Personal contribution** and innovation in resolving the problem;
- Originality and **innovation** of the project;



- **Competence** of the participants for project justification and interest in the problem addressed;
- **Aesthetical** and **technical design** of the project and written literacy;
- Competencies for **sustainable development** and enrichment of the mankind.

When applying this method the role of the teachers/trainers is of **facilitators, consultants, mediators, associates** and **counselors** of the students. They **have to be able to motivate them** for this unusual activity: Why is it necessary for them? How it will help them? What can be the final product and how it will be useful for them in the future? Why is it worth it? This type of **motivation** is very important, especially for marginalized groups, where the benefit and the added value from the realization of the project have to be very well indicated for each participant.

The teacher supports and organizes the learning and their function is to ensure the following training features:

- **Theoretical** and **methodological** clarity of the purpose, the nature and the technological implementation of the project;
- **Introduction** of the driving/leading **question**;
- **Presentation of the content**, the structure and the selection method of materials;
- **Provision** of sources;
- **Assistance** in organization;
- **Support** and conflict mediation of participants;
- **Development** of strategies for effectiveness and support of the process and the participants.

Project training has the following advantages:

- **The learners** have the exceptional opportunity to be in **the center of the process** as **active participants** and discoverers of new experience and knowledge. **The teachers** participate as **counselors** and **assistants** who create appropriate **learning environment** for the individual and **creative work** of the students;
- It increases **the quality of the learning process** and the learning **motivation**;
- Students **deepen their knowledge** on a specific topic;
- Students **plan their work** to achieve the goals set;
- They work **independently**, individually or in **as a team**;
- They understand better their **strengths and weaknesses**;
- They bear **responsibility** for the implementation of the task assigned; They work in **an environment** which is real or close to real which supports their future **professional realization**;
- They **solve problems** and overcome conflicts.



Project-based learning is an effective and **engaging process** and tool which can be used as a valuable supplement to the theory and practice of Suggestopedia because it ensures active participation of the students and involves them in **real life situations**.

GAMES AND TASKS

Task 1

Watch the video about problem-based learning and work out characteristics that make it different and similar to project-based learning.

<https://www.youtube.com/watch?v=UpukYVuruqk>

After you finish the task check the following video:

<https://www.youtube.com/watch?v=bAi1EuMyafE>

Task 2

Choose a very simple topic, such as a planting a tree and try to develop a project-based learning process for it.

Task 3

Choose a part of your teaching material (for example, irregular verbs) and create a project-based learning process. Think about how you can incorporate the process in your daily work?

Task 4

Choose some topics and for each of them try to formulate a driving question.

For example: Medieval Europe, Geography of Asia and Oceania, Tenses in English, Boat Construction, etc.

Task 5

Take a look at the students' project from the link and describe the basic characteristics of the project-based training that you see in it. What is missing? Can you add the lacking main characteristics? What conclusions can you draw from the results that you see?

<http://www.rio-ruse.org/?p=4590> (Description in English is available in the Appendix)

PRESENTATION OF THE LEARNING OUTCOMES

Describe the basic features of a model that you would like to use in your work. How would a project-based learning process look like when applied to a topic chosen by you? Which are its characteristics? Describe them and discuss your ideas with your colleagues.



MIND MAP AND BASIC TERMINOLOGY

Check the mind maps at:

<https://prezi.com/mxguebp3m5oz/mind-map-project-based-learning/>

<https://www.pinterest.co.uk/pin/116108496616129871/>

Watch the following videos and create your own mind map about project-based learning.

<https://www.youtube.com/watch?v=LMCZvGesRz8&t=49s>

<https://www.youtube.com/watch?v=7uU8oO--5XE>

<https://www.youtube.com/watch?v=bUCbCoDpwD0>

Is there something that is not clear to you yet? If so take another look at the video and text materials included in this topic. For more information, use the bibliography of the topic and the materials available on Internet.

GOOD PRACTICES

Check how projects can be used by different age groups and think if you can apply something from what you saw. Write it down.

http://radosttoneva.weebly.com/uploads/1/6/2/0/16206236/2_project_learning_rt-sait.pdf

Take a look at this example of training adults which uses project-based learning. What are the characteristics that you find? Is there any difference between adults and children? What would you change in the process and the methods when working with adults? How would a learning process for adults look like when project-based learning is used?

<https://whardaway.com/2017/11/08/project-based-learning-for-employee-training/>

PRACTICAL APPLICATION

Think of a topic related to your direct work with trainees/students and try to turn it into a project. Think of a principal question and check it with the help of the matrix in the Appendix of the topic. Describe the main stages of the project-based learning process and think about what final products the learners would have to create as a result from their work.

Share your work with us at: suggestopediainstitute@gmail.com



CHAPTER 3

Model of fast and effective learning

„Everyone has their own version of Suggestopedia.....”

Prof. Dr. Georgi Lozanov

OBJECTIVES OF THE TOPIC

After you get familiar with the topic you will be able to:

- To describe and recognize the learning structuring model;
- To point out at least one characteristics of each stage of the model;
- To analyze and compare the individual stages in relation to your tasks of preparing and conducting training programmes;
- To apply the model for planning classes for learners;
- To give examples of how you could use the model in your work;
- To identify examples and analyze the implementation of the model;
- To create new characteristics for the individual stages related to the model's implementation it in your work;
- To give examples of activities at each stage.

VERIFICATION OF THE UNDERSTANDING

In a group or by yourself, discuss and record the answers to the following questions and tasks:

- What stages do you go through when preparing a class?
- What are the main elements of planning and conducting training programs/ classes that you use into your work?
- Through what stages do your classes pass?

CONTENT INTRODUCTION

The **Learning Structuring Model** is a cycle of stages for preparing training programs and courses which is based on the **Suggestopedic cycle**, the **Colb's cycle** and the **11-step model of the International Center for Accelerated Learning (ICAL)**, developed on 10 theories of psychology, pedagogy, learning and personal development. The **Suggestopedic Cycle**



has been applied for more than 40 years in classical Suggestopedia (for more information, "Suggestopedia"). **The Colb's Cycle**, formulated in 1984 by David Colb has been applied in business and education through experience for more than 30 years (for more information, See Chapter „Experiential Learning and Learning Styles") The ICAL model has been successfully applied over the last 35 years worldwide by experts from the institute and is used for the preparation of training events and programmes.

In this chapter, we present our understanding of the interrelation of these three concepts of content **structuring**, **preparation** and **implementation** of a training program. To get acquainted with the origin of the **Suggestopedic Cycle**, you can contact the Suggestopedic Institute „Prof. Dr. Georgi Lozanov" in Bulgaria. For the implementation of the Colb's cycle - the world-renowned organizations such as Outward Bound, The Duke of Edinburgh's International Award and various business organizations. For the **11-step model** and its implementation, you can contact the International Center for Accelerated Learning (ICAL) in the United States.

The present learning structuring model preserves many elements of the structure of suggestopedic and desuggestopedic foreign languages teaching methods for adults. It combines this structure with the developments of the **Center for Accelerated Learning** and the stages of the **Colb's Cycle** further developing their concept thus giving the teachers a powerful tool for structured planning and preparation. The model is composed of **5 stages**, **8 elements** (rules) that are present at each stage and **13 consecutive activities**. Each stage and each activity contain a set of actions for preparation of a training program, course or class. Each of **the stages** and **activities** provide the trainer and the teacher with **a set of ideas** and **tools** for preparing **content** and activities of a program.

Stages:

1. Preparation – analysis and globalization;
2. Introduction;
3. Introduction of learning material;
4. Development and activation;
5. Artistic presentation and application

Elements/Rules:

1. **Love** – Establishment of attitude and relationships. Maintenance of teaching flow. Falling in love with the subject taught.
2. **Freedom** – Creation of many incentives. Design of goals (effective/affective plan) and framework. Generation of a maximum number of activities for different types of learners;
3. **Conviction in the teacher** – Voice and intonation. Attitude creation;



4. **Manifold increase of input volume** – Competence definition and volume of the learning material;
5. **Global-Partial, Partial-Global** – Analysis and globalization of the material;
6. **Golden proportion** – Design of timing and stages and design of materials and environment;
7. **Use of classical arts** – Introduction of information, environment and periphery;
8. **Evaluation and application** – Assessment and establishment of application environment.

Activities:

1. **Analysis and globalization** (synthesis) of content;
2. **Preliminary activities** with the students – conduction of **an interview (assessment center)**;
3. **Opening**;
4. **Overview**;
5. **Goals**;
6. **Initial team task**;
7. **Active introduction** of the learning material;
8. **Passive introduction** of the learning material;
9. **Developments** (primary, secondary and tertiary);
10. **Creative presentation**;
11. **Review**;
12. **Closing. Ritual**;
13. **Application**

Characteristics of the model:

Stage 1

Preparation, analysis and globalization

Activities

1. **Analysis and globalization (synthesis) of content**
 - Content analysis and determination of competency cores of teaching;
 - Analysis of the expected results, behaviors and definition of a profile of the successful learner;
 - Globalization of learning content;



- Determination of the nature and the environment of application
2. **Preliminary activities with the students – conduction of an interview (assessment center)**
 - Preliminary communication with the learners, which includes teaching materials;
 - Conduction of individual interviews with students. Identification of suggestive barriers and creation of strategies for overcoming them;
 - Conduction of assessment center for evaluating the competences of the students before the course;
 - Set up of expectations and prestige;
 - Hall arrangement and creation of a positive environment;
 - Welcome poster;
 - Flowers and music.

Stage 2

Introduction

Activities

3. Opening

- A creative, energy-boosting activity that connects the teacher, the material, and the learners;
- Opening activity that allows the participants to get acquainted and establish relationships with each other;
- May be social, meaningful or both;
- Starts each separate course or section/cycle;
- The first activity has an enormous strength because it sets the tone of the course and gives an idea of what is to follow;
- Both learners and teachers exchange ideas and information.

4. Overview

- Done at the beginning of the course and of each cycle;
- The overview gives the floor to the teacher to present the „big picture“ of the course or the section/cycle;
- The teacher provides information about the global learning content and builds connections in a common human plan;
- The first course overview includes defining roles and working rules.

5. Goals

- Goals are presented at each section/cycle;
- They create expectations and attitudes for learning;
- They formulate the responsibilities of the students;



- They synchronize students' personal goals with the purpose of the course;
- Students can interact with the material and ask questions.

6. Initial team task

- It is done only at the end of the cover (the first cycle of the course);
- Allows the groups to work together and to identify their knowledge of the subject taught;
- For a first time the students create a product, demonstrating to the teacher their level of knowledge and understanding of the learning content;

Stage 3

Introduction of the learning material

Activities

7. Active introduction of the learning material

Specially selected classical music is used in all cases during the active introduction and the teacher prepares on how the information will be introduced.

- **Active concert session**
 - A way to provide new information in which the teacher presents directly parts of the narrative of the course from the student's textbook
- **Role-play**
 - Interactive way of presenting new information;
 - Role-plays can be conducted by the teacher or the students;
 - Suggestopic texts are read in drama role-plays or introduction of new material;
 - Spontaneous role-plays allow learners to contribute with their own information.
- **Cooperative learning**
 - The teacher introduces the new material with the help of games, puzzles or cards with pictures or questions;
 - Students work together to process the new information.
- **Audio-media**
 - The new material is presented via various channels such as text, video, audio and web technologies;
 - Students watch carefully and concentrate (individually) on their own devices or on the screen.
- **Peripherals**
 - The teacher uses peripherals to present new teaching material;
 - Peripherals bring in lexical, grammatical or technical content;



- Peripherals use sketches, drawings, pictures, words or short texts.

8. Passive introduction of the learning material

During introduction, in all cases, a specially selected classical music is used.

- **Passive concert session**
 - A way to provide new information in which the teacher presents directly parts of the narrative of the course from the student's textbook in which they do not follow the text;
 - Creates a calm and concentrated psycho-relaxed state of mind
- **Visualization**
 - A way of introduction that focuses on the use of all senses;
 - Visualizations can be guided, partially guided and self-contained. A great deal of attention should be paid by the lecturer to how to conduct visualizations;
 - Allows students to explore the new material in a unique way that can take them anywhere.
- **Mini lecture**
 - A way to present new information in which the teacher provides the new material as a lecture;
 - Depending on the age of the students, minilectures should vary from 10 to 25-34 minutes;
 - The teacher keeps the attention of the students by giving them an interactive mini-lecture.

Stage 4

Developments and activation

Activities

9. Development (primary, secondary, tertiary)

- **Primary development**
 - Developments allow learners to rehearse and explore the information that is introduced;
 - In the primary developments, the teacher acts as a lecturer or speaker (the information is provided by the teacher);
 - Allows students to build knowledge and understanding of the material;
 - Primary development examples include TPR methods (total physical reaction, as in ICAL theory), stories, passive concert readings, short writing or drawing exercises, guided experiments, brain stimulation, sound and language tasks, „live sentences“.



- **Secondary development**

- Secondary development requires the teacher to act as a trainer (the information comes from both the teacher and the students);
- Students work with the material at a deeper level, focusing on its application and analysis to develop skills in the field;
- Examples of secondary developments include student-led reading activities, role-playgames, writing or painting exercises, cards with pictures or questions, group discussions, games and puzzles, research projects, and many more.

- **Tertiary development**

- In tertiary developments the teacher takes the role of a facilitator (the information comes mainly from the students and circulates between them);
- Students spend more time working with the material to synthesize and evaluate the information and to gain insight of it;
- Tertiary developments are like quizzes - while students work with the material, the teacher facilitates the activities and can evaluate how the students deal with the material;
- Examples of tertiary developments include individual reading, writing exercises, preparation of presentations, group games, diary, creative writing, problem solving tasks, board/poster creation, manipulation of suggestive texts, choir reading, composing songs and poetry, graphic novels and more.

Stage 5

Creative presentation and Follow-up

Activities

10. Creative presentation

- Creative presentation allows students to take on the role of teachers and repeat the behaviors and competencies demonstrated by the teacher at the beginning of the course or cycle/section;
- An environment of collaborative creativity is established, with many artistic materials and means that students can use;
- The presentation shows and tests how the student has mastered the material;
- The success and achievements of the students are what is sought ALWAYS, not their failure;
- The teacher ensures plenty of good quality practice before testing;



- The content peripherals are left hanging on the walls during presentation and verification;
- During the presentation and the test students are allowed to use all learning materials (in a real working environment, they are expected to use the available resources and consult someone if they cannot perform a task on their own);
- Presentation formats and tests that students can do in pairs or in groups are created;
- The word „test“ is avoided - it is good for the trainer to build a glossary of non-threatening words and phrases for evaluation and testing;
- The creative performance tests all of Bloom's levels - initially testing the lower levels, and with more practice and rehearsals, the teacher moves to the highest levels.

11. Review

- The review tasks and activities are the teacher's last opportunity to provide additional information about the „big picture“, to clarify or passively fix the content presented in the course or cycle/section;
- If the teacher observes gaps or mistakes during the creative presentations, the review gives him the opportunity to tackle these problems before the students get „stuck“ in them;
- Activities that summarize and paraphrase key information from the chapter;
- The review revises the content presented in the Overview activity.

12. Closing. Ritual

- Ritual for completing a cycle/chapter or a course;
- Final activities of a cycle/chapter or a course;
- Creates in the students a sense of completion from their interaction with the material, the environment and among each other;
- Gives the learners a sense of success from completion of the course and confidence that they can use and practically apply the knowledge from it.

13. Application

- It is done after the cycle/part or the course;
- Can be in the form of creative individual work (outside of the course) or as follow-up communication aiming at application of what was learnt;
- Measures the effect and the application of what was learnt during the course on the work or the classroom after its completion.



GAMES AND TASKS

Task 1

Describe each step of the model and point out its characteristics.

Task 2

Think of a topic that you can structure using the 11-step model. Start with something simple, for example: „How to tie our shoe laces?“. Use the model to teach your students how to tie their laces by going through each stage and describing what the learners should do and achieve at it.

Task 3

Give examples of activities for each activity of the model (How many are the activities in total and which are they?). Write down the activities in a file to be able to use them for your work in the future.

Task 4

Add characteristics of the model and the individual activities that are relevant to your work. How will the individual activities look like in your work and your teaching practice?

Task 5

Prepare a class/session from the subject you teach following the learning structuring model. Describe all activities and take notes of the elements.

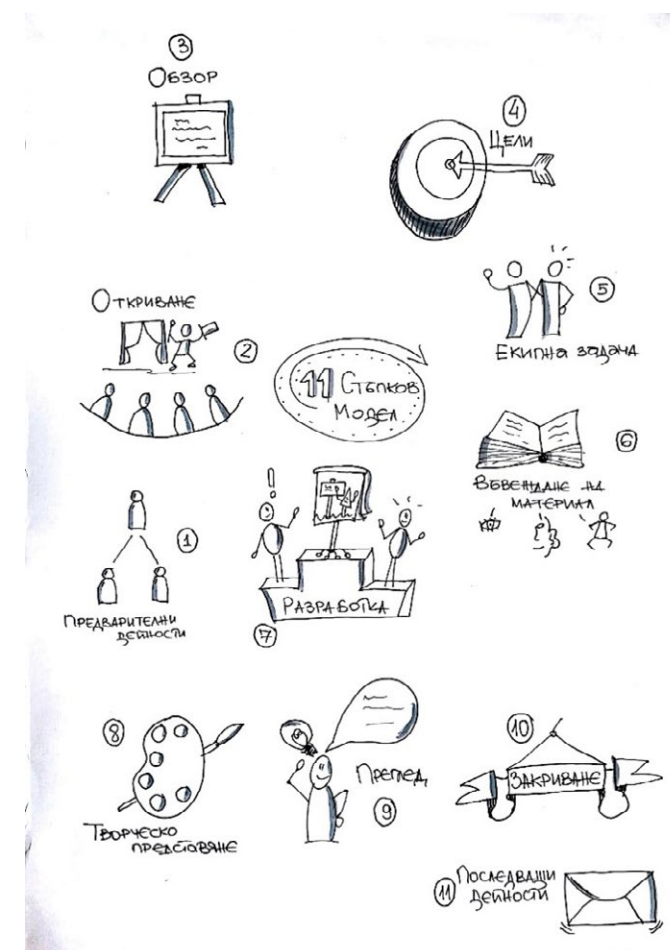
PRESENTATION OF THE LEARNING OUTCOMES

Present a class planned according to the model to your colleagues, with whom you can discuss it. What feedback do you get? Try it with the students you work with. What results do you achieve? Describe them and draw conclusions and notes.

Can you add any activity to the model? In which part of the model can you add an activity or add up to one of the existing activities? Write down your proposal and submit it to: suggestopediainstitute@gmail.com. We will send you feedback.



MIND MAP AND BASIC TERMINOLOGY



Take a look at the mind map of the particular activities of the model. Which theories of the current NEWave in Learning methodology can be integrated into the model? Give examples.

GOOD PRACTICES

Check out the ICAL materials in the Annexes and find out more about how they work over the past 35 years. For more information, visit: www.center4all.org.

PRACTICAL APPLICATION

Take a look at the learning structuring model and give examples of how you can use it in your practice. What would you plan in the 13 activities and what would you use from it? In your role of a teacher, think about and write down how the model will help you in your future work with students.



NEWave in Learning

*Innovative programme for fast
and effective learning*

© 2018 NC Future Now / All rights reserved

Autor Team:

Theodor Vassilev
Milena Lenva
Assoc. Dr Galya Mateva
Diana Bakalova
Maria Tencheva
Plamen Natov
Kremena Tsankova
Ognyan Gadoularov

Graphic design:

George Merdzhanov