

“SUGGESTION” AND “RELAXATION” IN THE DESIGN OF LEARNING AT SCHOOL (THE IDEAS OF GEORGI LOZANOV (BULGARIA) AND ISRAEL SHVARTZ (RUSSIA) IN EDUCATION)

**Dr. Veska Gyuvitska, Assoc. Prof.,
Dr. Mirela Kyuchukova, Assist. Prof.**
South-West University „Neofit Rilski“ (Bulgaria)

Abstract. The article includes a theoretical overview of the ideas of two scientists: Georgi Lozanov (Bulgaria) and Israel Shvarts (Russia) and an empirical study of their popularity and use by Bulgarian public school teachers. The two scientists worked in the 70s of the 20th century and came to have similar psychological and pedagogical ideas in the field of learning. They are related to the role of suggestion and relaxation in the educational design of children and adolescents, as an opportunity for its optimization and charging with emotions and positive experiences, or as a means of relaxation and recovery.

Keywords: suggestion; suggestology; suggestopedia; relaxation; relaxopedia; education

In the digital XXI century, in the context of the innovative school, which is searching for new methods and approaches in education, we revisit the ideas of Georgi Lozanov and Israel Schwartz for the optimization of the learning process based on positive experiences, emotions and the opportunity for recreation and recovery of children and adolescents. The present research aims to make a theoretical overview of the ideas of the two authors, who worked independently of each other in Bulgaria and Russia, respectively, and to explore the application of their methodology by teachers in the Bulgarian public school.

The tasks we set ourselves are to make a theoretical overview of the ideas of Georgi Lozanov and Israel Schwartz in psychology and pedagogy and compare these, analyzing the role of suggestion in the pedagogical process, clarifying the scientific concepts of suggestology, suggestopedia and suggestion as defined by Georgi Lozanov, and conducting a survey of teachers in the Bulgarian school concerning the knowledge of these methods and their application in the teaching practice.

1. The ideas of Georgi Lozanov and Israel Schwartz in psychology and pedagogy – comparative characteristics

Georgi Lozanov (1926 – 2012) is the only Bulgarian educator, who has a patent right for his method called suggestology as the science of suggestion and suggestopedia as the transformation of suggestion into a basis for learning. He received medical education and specialized in psychiatry, and his second higher education related to psychology and pedagogy, enabled him to use his method in teaching children and adults. Lozanov's professional career is extremely diverse. In the period from 1966 to 1985, he headed the State Institute of Suggestology and conducted experimental work on suggestopedia in several cities in Bulgaria. The results are extremely promising and suggest reducing frustration in learning and revealing the reserves of the human mind. In Bulgaria, from 1972 to 1984, almost 1,500 students in 15 schools were trained following the Lozanov method. From 1985 to 1994, he was head of the Scientific Center for Suggestology at Sofia University, and in his last years, the Center for Learning Research in Austria.

In 1978 specialists at UNESCO officially recognized suggestology as: “a good pedagogical practice” and recommended its use. Lozanov's works have been translated into English, German and Spanish and he has followers and schools in Europe, America and Australia. From his becoming a legend to his complete rejection and oblivion in Bulgaria, he preserved his dignity as a man and a scientist and spent his last years in his homeland. In the book “Suggestopedia – desuggestive training. Communicative method of the reserves hidden in us” published in 2005, Lozanov summarizes his ideas and the scientific path traveled. Regardless of his illustrious career and ideas of an inspired and art-based education, the great sadness of the early loss of his mother when he was only 2 years old remains in his books, as a desire to revive the memories of something extraordinary and priceless. The appeal to memory and the deep foundations of the mind, enlivened by the grandeur of a mystery that remains unsolved, runs through all his books and scholarly pursuits.

Today, many of the ideas of suggestopedia are subject to verification and have their contribution primarily in foreign language learning and especially in speech acquisition. Training has never been and will never be an easy activity because it involves effort and daily work. The possibility, however, to look for ways for diversity and grounds for the role of art and inspiration in education itself, as ideas suggested by Georgi Lozanov still remain and are particularly relevant in an innovative school.

At the same time – in the 70s of the XX century, when Lozanov was developing his suggestology, in Soviet Russia Israel Schwartz (1919 – 1989) was working on the problems of “Suggestion and persuasion in the pedagogical process”. By conviction, the author understands a method of pedagogical impact, which appeals to the consciousness and feelings of the person and aims to form a conscious attitude towards the world. It is based on evidence and inference. Suggestion addresses

subconscious realms of the human psyche and can be a state of wakefulness, relaxation, hypnosis, or sleep. As a type of suggestion, it can be direct, indirect, positive, negative, etc. The combination of persuasion, which is aimed at building the worldview of the child's personality, and suggestion, whose message is emotions and feelings, can improve the pedagogical process.

Schwartz assumes that suggestion is a dynamic quantity in human life and a type of man's unconscious reaction against an external suggestive influence. Suggestion is influenced by a person's degree of suggestibility, which can be low, medium, or high. It is remarkable that he connects persuasion, which is a conscious process, and suggestion, which is an unconscious process, into a whole in the course of pedagogical influence. Both processes are realized through the presence of dominant attitudes, which can both be created and extinguished under unfavorable conditions. Based on the connection of persuasion and suggestion as methods of influencing the personality, he introduced the concept of “relaxation” and “relaxopedia”, where the tension of the psyche is artificially reduced, but the supermemory is preserved. It is particularly successfully applied in the teaching of foreign languages. Words are remembered during relaxation, but from the state of relaxation, students are brought out with the help of persuasion and work with the stock of words, including them in activities. Relaxopedia as a theory and practice leads to an increase in student success and is associated with overcoming negative feelings, stress and fatigue.

Schwartz elaborates the pedagogical variants of suggestion as: direct, indirect and self-suggestion. He includes suggestion in various forms and subordinates it to the idea of social and moral education. Among the forms of implementation of suggestion are:

- psychoregulatory training related to relaxation,
- direct suggestion and dominant attitudes,
- self-suggestion auto-training,
- socio-pedagogical training when solving a task,
- media shows for children related to suggestion and persuasion.

The similarities between Lozanov's and Schwartz's ideas are obvious, as both authors' monographs were published in 1971. Their ideas are primarily applied to foreign language learning, and their basis is suggestion as a method and the possibility of suggestibility as a personality quality. There are differences in concepts such as Schwartz's “relaxopedia” and Lozanov's “suggestopedia”. For Schwartz, the relationship between: suggestion and conviction, focus on education, sessions, which are psychoregulatory in nature, is decisive. For Georgi Lozanov, suggestion is a priority method of learning and is related to the impact of art, which plays the role of a suggestion-stimulating factor. There is no difference in the message of both authors about the role of the subconscious beginning in the education and upbringing of students and the reserves of the human psyche as an assistant in the pedagogical process.

2. The role of suggestion in the pedagogical process

Suggestion is a psychological method of emotional impact on people, which is effective and irrational in nature. "Suggestion is an element determining social and individual psychology, it interacts with all the main components of the structure of socio-psychological communication – persuasion, imitation, conformity etc." (Schwartz 2009, p. 99). It can take place in the course of human interaction and communication through verbal, non-verbal and para-verbal means.

Suggestion as a mechanism is explained by the ratio between subthreshold and threshold perceptions: a subthreshold stimulus is so strong that it causes an influence and so weak that it cannot be perceived... the trace left can later be activated (Stefanova 2005, p. 427). Suggestion is a part of social life and can be of different nature, strength and manifestation such as: direct, indirect, conscious, unconscious, hypnotic, self-suggestion, etc. It can inspire, but it can also kill the personality by taking over the emotional world. As a method of educational influence, it is often underestimated because it is associated with an uncritical attitude towards others, adopted on the basis of trust. With suggestion, the emotional world and behavior of the child's personality changes. Factors that increase the affect of suggestion can be external, such as stressful and unfamiliar situations, as well as internal related to shyness, fatigue, illness, lack of knowledge. Children are particularly susceptible to suggestion, due to lack of life experience and emotional resilience. The possibility for the personality to be manipulated through suggestion is available. According to Schwartz, children do not need to justify suggestion, as suggestibility is a natural process in childhood. While or Lozanov, suggestion plays the role of a psychological regulator in learning, for Schwartz, suggestion will be contingent on both didactic goals and moral education. Its classification and forms of applicability will be much more global, and self-suggestion will become the basis of self-education.

Both scientists preserve the typical physiological and psychological characteristics of suggestion and the significant role it plays in the course of the entire pedagogical process. Suggestion plays role of a method of pedagogical influence, which changes the direction of its interpretation.

3. Suggestology, suggestopedia, suggestions as scientific concepts by Georgi Lozanov

There is a difference between the concepts "suggestion", "suggestology" and "suggestopedia". The ideas of Georgi Lozanov, as a theoretician and creator of suggestology and suggestopedia, pass through different stages over time:

1. Hypermnnesia (1955), suggestology – desuggestology (1970).
2. Suggestopedia – Desuggestopedia (1970).
3. Suggestological theory of communication (1975).
4. Desuggestopedia – a communicative method of the reserves hidden in us (2005).

5. Reservopedia (2009) (Evstatieva 2012).

Each of the paths of knowledge that Lozanov chooses is protected experimentally and becomes an inspiration for many specialists in the field of psychology and pedagogy.

3.1. Suggestology

The word suggestology comes from the Latin *suggero, suggesti, suggestum* – I suggest, hint, , and Old Greek. *λόγος /logos/* – teaching, science. The Bulgarian psychologist Georgi Lozanov created it as a modern science for revealing the reserves of the human personality on the basis of suggestion. Suggestology as a science of suggestion is primarily used in psychiatry as hypnosis and clinical suggestion and in pedagogy as suggestopedia and reservopedia with the hope and desire to help the individual to unlock their psychic reserves.

The basic concepts are:

- suggestions and de-suggestions, i.e. suggestion and release from suggestion;
- paraconsciousness as unconscious mental activity;
- reserves of the personality such as genetically embedded, but not manifested abilities, including hypermnnesia (supermemory) and hypercreativity (supercreativity);
- peripheral perception related to long-term memory;
- means of suggestion such as intonation, rhythm, trust, authority;
- multiple personality achieved by changing the person’s name and biography in the course of training;
- societal suggestive norms that tell us what we can and cannot do and achieve.
- suggestive barriers of an ethical and logical nature, including how the teacher can behave and what is pedagogical and what is not in the class, lesson and school.

Along with the familiar forms of suggestion with a verbal and non-verbal nature, Lozanov introduces in his methodology: a method with a conscious component such as motivated suggestion and suggestion of satisfying expectations and the placebo effect complemented by suggestion without a conscious component such as dream-like breathing and the whispering method where the words are spoken at the threshold of their audibility. The introduction of suggestology in education leads to the establishment of sutestopedia as a new branch of pedagogy (Lozanov 2005).

3.2. Suggestopedia

The prototypes of the suggestopedic system in the world’s methodological practices go by names such as: SALT, Superlearning, Accelerated Learning, Optima Learning, Pars Omni, Quantum Learning, etc. Bulgarian research on suggestopedia continues Lozanov’s ideas in different directions. He himself always emphasizes the therapeutic effect of suggestopedia, where the goal is to build a harmonious relationship between teacher and student, and to overcome all risk factors that trigger states and emotions of fear. “This applies in full force to the teacher in

suggestopedia, where the goal is the simultaneous release (de-suggestion) of the inhibitions of development accumulated in evolution and stimulating the disclosure of the reserves – the unused human possibilities” (Lozanov 2009).

Suggestopedia is a combination of “medicine, psychology and pedagogy” and an original training system. The method starts from psychotherapy, where Lozanov seeks a healing method through a suggestion that implies harmony between the doctor and the patient. In pedagogy, the method requires “soft communication” between teacher and student and changing the attitude towards punishment. It is based on 7 laws:

- The first is love, because during the lessons “no one is hurt, no one hurts anyone”.

- The second law is Freedom is because teacher and student are equal: no one reprimands anyone.

- The third law of suggestopedia is the teacher’s confidence that the learner has more resources than he shows.

- The fourth law of the educational and remedial method is the increased learning material and the use of the memory potential.

- The fifth law is “whole part – part whole”. One of the secrets of learning is that “each learning element should be presented within the framework of the whole”.

- The sixth law states that it is necessary to observe the golden ratio in the learner’s strengths.

- The seventh law is the relationship between science and art. Classical art is embodied in specially selected musical and literary works against which scientific concepts are studied.

Mariana Stefanova examines the suggestopedic method at the level of a pedagogical invention. In practice, this means that it can function at a technological level, i.e. as an educational technology through concrete suggestopedic techniques of the teacher. Basically, they are interactive in nature and innovative in purpose. For their implementation, the style of the teacher – suggestopedist is important, such as:

- 1) indisputable authority – when the suggestor does not doubt in the least the success of the suggestion;

- 2) intellectual – when the suggestor explains everything he does;

- 3) emotional – in which the suggester’s need for sympathy, good self-esteem and safety, security is used;

- 4) passive – when the suggestor assures that he cannot do anything without the help of the suggestee, creating the illusion that he does everything himself (Stefanova 2009).

The connection between suggestion and creativity is brought out mainly in the seventh law about the role of art in learning. “An extremely delicate psychological process emerges of mutual deep familiarization, tolerance, understanding at a

paraconscious and parapsychological level, affecting a high degree of creativity” (Gateva 1994). Suggestopedia is successfully applied in foreign language learning: “In foreign language learning, many suggestions, suggestive stimuli unconsciously come from the authority and preparation of the teacher, from his way of speaking (intonation, articulation of the foreign language), from the aesthetics of the learning environment and materials, from the overall attitude of the teacher towards the foreign language and culture, from his stimulating attitude towards each student, from the communication models he offers. All these signals should be aimed at strengthening confidence, removing the fear of memorizing and correctly pronouncing language structures, of speaking and solving communicative tasks through the foreign language. The suggestopedic teacher is trained to use such suggestive techniques and stimuli that bring to the fore the achievements, not the mistakes, that suggest ease in memorizing concrete language units and their creative application in various communicative situations” (Mateva 2018, p. 3).

In the linguistic aspect, the modern suggestopedic model for learning foreign languages is oriented towards communication, not language. It is assumed that G. Lozanov’s model is highly effective for learning spoken language and can be successfully combined with other methods (Evtimova 2012). For other authors, the main emphasis is on early literacy through the suggestopedic method as “an original Bulgarian variant of global learning, in which the leading idea is the comprehensive presentation of the learning material, where the perception of the whole must precede the perception of its parts” (Lecheva 2009). “Working with the method is an inexhaustible source of ideas and creative energy, development and sharing, and there are no limits to revealing the memory and personal reserves of the learners. These reserves include: memory reserves; cognitive and intellectual reserves; creative reserves; socio-communicative reserves; learning without fatigue” (Ivanova, Kaneva 2010).

3.3. Technology of the suggestopedic lesson for foreign language learning with Georgi Lozanov

1. Introduction. The teacher introduces the students to the vocabulary and grammar of the foreign language. He strives to do this by repeating phrases that will unconsciously be remembered in the course of the etude he has chosen. The teacher introduces himself; the students must do the same by inventing new names and biographies.

2. Concert session. Active: Combination of classical music and pronunciation of words, expressions, phrases by teacher and students. The main emphasis is on pronunciation and rhythm. Passive: The teacher reads the text of the lesson again with normal intonation, and the students listen.

3. De-suggestology – students free themselves of their tension with the help of activities such as drawing, modeling and construction. Breathing exercises are also introduced in Lozanov’s first lessons.

4. Development. The students repeat the text after the teacher and his explanations, mostly through role-play and through chorus songs. The game and song are mandatory for this phase.

5. Production. Students speak freely and without correcting their mistakes, evaluations are made, photos are viewed, comments and discussions are made in the foreign language. The teacher guides the speech situations and the scenario of the lesson.

In the technology of this type of lesson, the artistry of the teacher and the freedom of his behavior and presence are mandatory. Each lesson moves according to a certain scenario and is accompanied by bright props and masks, aiming to make the students feel comfortable and in a good mood. Particular attention is paid to the integrity of the texts being studied and the scenario that presents them. The goal is to release the accumulated memory banks created in the first phases of learning through spontaneous communication. Music arrangement, fun, laughter and most of all play are part of learning. Baroque and classical music is preferred, which calms and excites the human soul.

3.4. The technology of relaxation in Izr. Schwartz includes

1. Preliminary familiarization with the new vocabulary through explanation, comparison, illustration and word – 10 min.

2. Introduction to relaxation as a state of rest for up to 5 – 7 min.

3. Relax-pedagogical acquisition of the new vocabulary – 25 min. through repeated pronunciation of the foreign words and role of pronunciation.

4. Coming out of relaxation – 5 – 7 min through a written report on what was learned and writing down the words in the native and foreign language (Schwartz 2009, p. 361).

Both scientists create a typical instructional technology for learning, regardless of its psychological underpinnings. It has strictly defined elements and goes through certain stages. Like any learning design, this one is subject to algorithms, but it also strives to be adapted in the service of children's thinking and sensibility. It implies a greater freedom, given the role of emotions and imagination, as well as the alternation of moments of stress and relaxation in the students' activities.

3.5. Suggestopedia or relaxopedia

The ideas of Georgi Lozanov and Israel Schwartz outlived their creators. Georgi Lozanov gets world fame, but Israel Schwartz does not have such a chance, due to the greater ideologization and the closure of education in Russia. The similarities between the two theories are obvious, as evidence that brilliant ideas have many authors who can arrive at them at the same time. Both suggestopedia and relaxopedia are aimed at the possibility of children's learning as a creative and inspiring process, regardless of the risk of manipulation, especially due to the time in which they live and create. The child's soul believes every message that comes from the adult world and can easily be guided by techniques such as hypnosis

or suggestion. Let's not forget that children are not patients, nor participants in a psychoanalytic session.

4. Survey on the application of Lozanov's methods by teachers in the Bulgarian public school

In the context of the present study, we conducted a survey of 30 teachers from the Bulgarian public school. The purpose of the study is to obtain information about the use of Lozanov's active learning methodology and its application. We conducted the research through an electronic survey containing 11 questions, three of them with the possibility of additional information. We surveyed 30 teachers, of which 21 were in the primary stage of education, 6 in junior high school and 3 in high school.

The results show that only 18 teachers are professionally familiar with the Accelerated Learning Methodology, and 12 of them do not know it in detail, this is a distribution of 60% to 40%, showing that a large percentage of teachers are not familiar with the methodology and accordingly they do not use it in practice (figure 1).

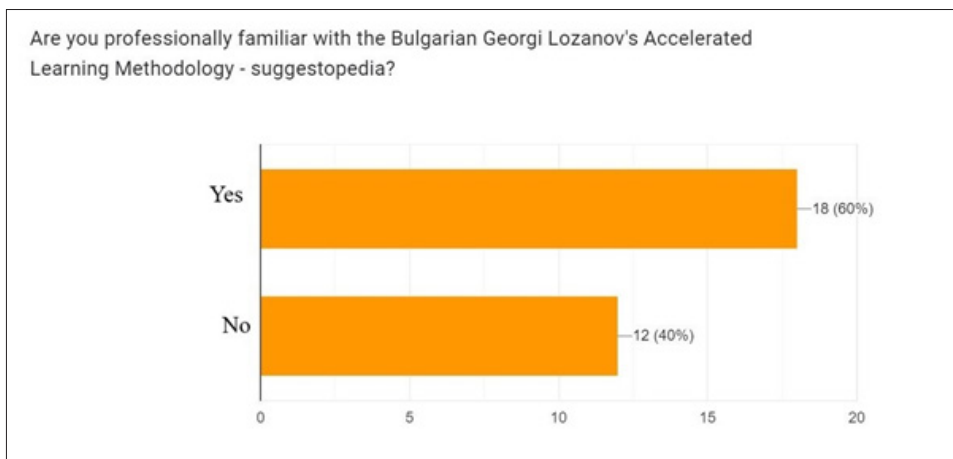


Figure 1

To the question: How did you become familiar with Lozanov's methodology? – the highest percentage of teachers answered that they used Internet resources (43.3%), with an equal number of percentages, respectively: from scientific journals and articles and shared experience from colleagues (and both answers 30%). Only 1% answered that they were not at all familiar with Georgi Lozanov's methodology, which we should interpret as a fact that the teachers have heard of suggestopedia, but do not know it thoroughly and professionally, judging by the previous answer (figure 2).

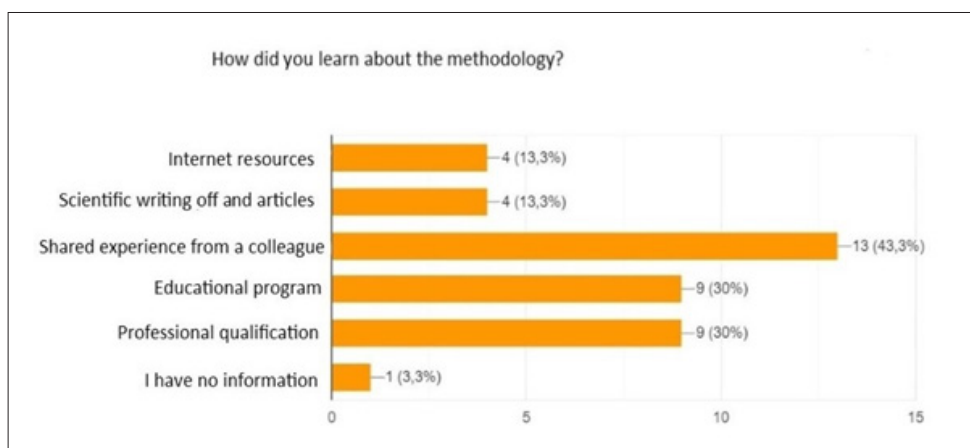


Figure 2

To the question related to the application of the methodology in practice, 19 of the teachers (63.3%) answer that they do not use it, 6 (20%) of them confirm its professional use in teaching practice and 5 (16.7%) teachers indicate, that they use it at the level of popular information (figure 3).

To the question: How often do you use Georgi Lozanov's methodology? – 23 out of 30 surveyed teachers answered.



Figure 3

Of them, 3 share that they use the methodology often, while 13 teachers answer that they use it mostly episodically, while the rest confirm that they do not use it. The answers about the results of the application of suggestopedia at school are contradictory – the same number of people – 4, evaluate the results as high, average, or satisfactory, while 20 teachers confirm that they do not use it in their practice.

We asked a question related to the need to find information and acquire pedagogical experience such as relaxopedia, and the answers are again very diverse. 4 teachers (13.8%) are interested in such methods, and 10 teachers (34.5%) are willing to get acquainted, 20.7% are categorically against, which is 6 teachers, and 31% are not inclined to develop your knowledge in the given direction (figure 4).

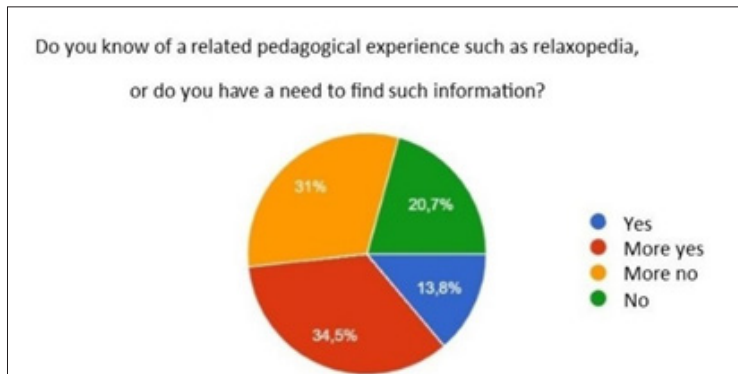


Figure 4

In an attempt to find the reasons for the usability of the methodology, we asked the teacher questions about the advantages and disadvantages of their application in practice. 41.4% of them pointed out the shared professional experience, 27.6% – personal experience and 24.1% – the opportunity to experiment. As far as the shortcomings are concerned, 33.3% point to the temporary effect of such methods and the same relative share opt for their lack of verification in practice (figure 5).

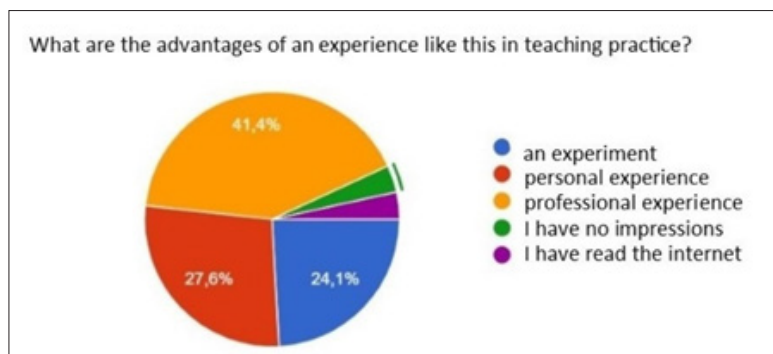


Figure 5

In conclusion, we asked a question related to the possibility of using Georgi Lozanov's Accelerated Learning Method and received satisfactory answers: half of the respondents are inclined to use the method, and 27.6% are convinced that they would, and 10.6% are not would take the risk and 3 people categorically reject the possibility (figure 6).



Figure 6

The last question of our survey is related to the attitude of teachers towards experimental programs, in case they have not yet used such in their professional activity. The results show that 43.3% would definitely participate, 33.3% are willing to participate, 20% are not willing to participate in experimental programs and one teacher is categorically against experiments in his work (figure 7).

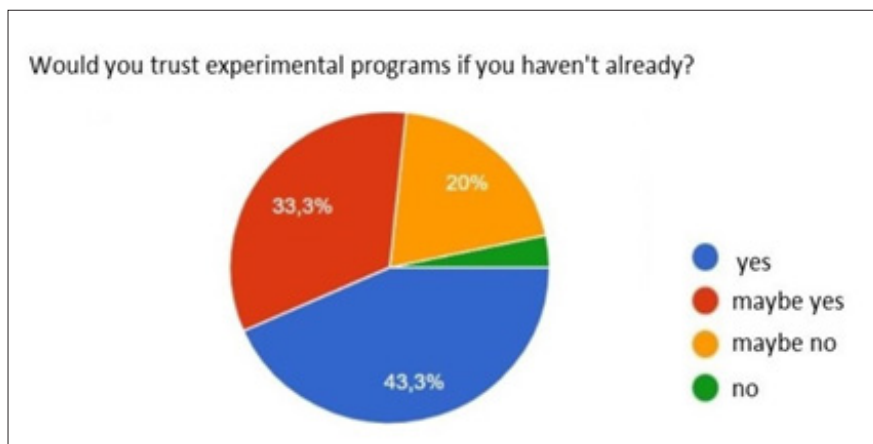


Figure 7

5. Conclusion

From the conducted survey, we can conclude that Georgi Lozanov's method is not popular enough among teachers in the Bulgarian public school. They are familiar with it without including it in their teaching practice. The few who use the method regularly confirm its good results in training. Of interest to the study is the attitude of teachers to learn more about the methodology and their propensity to participate in experimental programs in learning to improve the process.

Suggestion and relaxation are techniques that are close as a message in the learning of children and adolescents in the 21st century, regardless of the new social environment and technological mediators. Given the creativity in scientific thinking of both Lozanov and Schwartz, they reached similar ideas and results that continue to seek their followers and supporters in pedagogical knowledge. However, there are also differences in details that experts, specialists and teachers need to know in order to have the right to choose.

In dialogue with time, Lozanov and Schwartz direct their efforts as a priority in the field of literacy and foreign language learning, in order to avoid the possibility of ideological manipulation of the theories and innovative practices they propose. Schwartz is much more emphatic when he points out the relationship of suggestion and suggestibility to the upbringing and work of children with deviant behavior. This trend is characteristic of the entire Russian pedagogy, which places the care of children's souls first. Lozanov basically proposes an art-pedagogy and art-therapy, dictated by the introduction of art into the process of learning and teaching. There is a danger that the teacher will turn the lesson – scenarios into a self-serving spectacle. Learning has never been an easy activity, but in the sphere of the global didactic dimension, today more than ever, both children and adults feel the need for learning to counteract the pressure of any adverse social situation, as far as, of course, this is possible.

The desire of the authors not only to diversify the learning process, but also to facilitate and relieve the student is remarkable. The world of emotions continues to live in the modern child and to be an expression of their soul. In a digital world governed by algorithms and controlled by robots, it is good to remember the messages of Lozanov and Schwartz for learning that brings pure joy, not from the achievement, but from the opportunity to have fun, create and play. This is also the key to the future use of the method and the acquisition of information about its usefulness for Bulgarian children.

REFERENCES

- EVSTATIEVA, A., 2012. *Suggestology in foreign language learning – linguistic didactic analysis*. Sofia: SU St. Kliment Ohridski.

- GATEVA, E., 1994. The freedom of the personality in the communicative educational process, stimulated through suggestive-creative art. *Conference on suggestopedia*, Viktorsberg, Voralberg, Austria.
- IVANOVA, M.; KANEVA, M., 2019. Suggestopedia - a method in foreign language learning. In: N. YANKOV (ed.). *Scientific works college – Dobrich*, pp. 11 – 22. ISSN 2367-8356.
- LECHEVA, G., 2009. The suggestive teaching method and suggestopedia in the preparation of students – future teachers. *Scientific works of Ruse University*, vol. 48, no. 10. ISSN 131103321.
- LOZANOV, G., 2005. *Suggestopedia – Desuggestive Learning*. Sofia: St. Kliment Ohridski [in Bulgarian]. ISBN 9540721377.
- LOZANOV, G., 2009. Suggestopedia, subconsciousness and health. *Announcements of Union of Scientists*, no. 15, pp. 165 – 168. ISSN 1311 2864.
- MATEVA, G., 2018. Suggestopedia, basic concepts and principles in the light of foreign language learning. *Foreign Language Learning*, vol. 45, no. 1, pp. 28-38. ISSN 1314 – 8508.
- SHVARTS, I.E., 2009. Vnushenie v pedagogicheskomo protsesse. In: N.G. LIPKINA, L.A. KOSOLAPOVA, A.I. SANNIKOVA, B. M. CHARNYI. *Uchitel: Kniga o professore Izraile Efremoviche Shvartse*, pp. 79-387. Perm: Knizhnyi mir.
- STEFANOVA, M., 2009. Suggestopedic techniques in the work of the teacher: state, trends and perspectives. *Announcements of Union of Scientists – Sliven*, vol. 15, pp. 172 – 181. ISSN 1311 2864.

✉ **Dr. Veska Gyuvitska, Assoc. Prof.**

ORCID iD: 0000-0001-5017-9932

✉ **Dr. Mirela Kyuchukova, Assist. Prof.**

ORCID iD: 0000-0003-1376-6358

South-West University „Neofit Rilski“

Blagoevgrad, Bulgaria

E-mail: v_gyuvitska@swu.bg

E-mail: m.kuchukova@swu.bg