

REVIEW

of the dissertation on topic

"APPLICATION OF MARIA MONTESSORI METHODOLOGY IN GEOGRAPHY EDUCATION",

in a professional direction: 1.3. Pedagogy of teaching in ... (Methodology of teaching in geography),

developed by Stanislava Plamenova Misheva, assistant in the Department of Regional Development of the GGF, doctoral student of free preparation with scientific supervisor Assoc. Dr. Maya Vasileva to obtain the educational and scientific degree "Doctor"

By Prof. Dr. Krasimira Tabakova, professor of History Teaching Methodology (prof. direction 1.3.).

The review was prepared and presented on the basis of an order of the Rector of SU "St. Kliment Ohridski" for determining the composition of the scientific jury and scheduling a date for the public defense, the decisions from the first meeting of the scientific jury, and the Regulations for the terms and conditions for acquiring scientific degrees and occupying academic positions at SU "St. Kliment Ohridski".

Stanislava Misheva was born in Sofia. Graduated 23 "Frederic Joliot Curie" secondary school with Italian language profile. In the period 2007 - 2011, he studied at the Faculty of History, majoring in "History and Geography", which is pedagogically oriented (professional direction 1.3). Subsequently, he continued his studies in the bilateral Bulgarian-Italian master's program "Italian Philology: Anthropological Studies of the Mediterranean and the Balkans: Italy - Bulgaria" at the University of St. Kl. Ohridski" (2012 - 2013) and at the University of Rome "La Sapienza", Rome, Italy (2013 - 2014) and received a master's degree.

Stanislava Misheva began her work in private companies, and from 2015 to 2019 she worked at "Muzeiko" EOOD as an organizer of trainings and programs. Her work includes developing specialized science programs for children from 1st to 4th grade, implementing interactive learning, presenting science programs to teachers and students, etc. In this regard, she takes a number of specialized courses, such as Interactive teaching of children using the ICAL method (suggestopedic methods) - Libyan Labiosa Cassone, ICAL - includes work using the STEAM and Montessori methods (2015, 2016, 2018).

In September 2019, she won a competition for an assistant in "Teaching Methodology in Geography" at the "Regional Development" Department of the GGF at SU "St. Kliment Ohridski" where he is currently working (February 2023). During the past period, she conducted exercises, gave lectures, participated in scientific projects and research, in conferences. Working on the topic approved for the dissertation, she underwent training on the "Montessori method" at the Academy for Parents, Casa dei bambini community and

Montessori kindergarten "House for the Children", carried out training on the topic "Montessori at home: examples from practice".

She participates in research projects and has published 5 articles in prestigious scientific publications (See the Abstract, p. 47).

In 2020, she was recruited as an expert evaluator of geography tasks for the DZI, which shows her good methodological preparation in the field of school geography education.

The scientific work submitted for review by Stanislava Misheva has a volume of 219 pages and is structured in an introduction, three chapters, a conclusion, references, five appendices, etc. A prerequisite for the successful development of the dissertation work is an excellent knowledge of the scientific literature. 159 sources were used to write the dissertation, of which 68 in Bulgarian and Russian and 91 in English and Italian. This reveals the author's ability to conduct independent scientific research, derive concepts, analyze and synthesize scientific achievements, be critical of sources, and of course – the ability to use scientific terminology.

Geographic education is an element of the modern education system that strives to strengthen trust through dialogue, awareness, broad public consent and engagement. The recommendations and requirements of the EU, the good practices of the educational systems worldwide are guidelines to which the Bulgarian education also strives, but in such a way as to preserve its specific features and experience. Preserving the native tradition, education is synchronized with the new European standards, which require at the end of each stage that young people have acquired key competences, which prepares them for the next educational stage or upon graduation - creates the basis for future training and professional life.

One of the reasons why the author turned to the given topic is, without a doubt, the changing reality in society, the change among the younger generation and the strong influence of information and computer technologies in education. This is an indisputable fact that makes us look for and apply new methods and approaches in education.

The dissertation work has a theoretical and practical-applied character and is directly related to the problems, the solutions of which are sought by the modern geography education in the secondary school in Bulgaria. The doctoral student has clearly indicated the object, the subject and the objectives of the research, which she managed to cover in the course of the development of the dissertation work.

Already in the introduction Art. Misheva derived the main tasks of the research, namely:

- **First task:** To examine technology as a theory and methodology, based on which to derive its main characteristics as a key category in the dissertation research for the construction of a conceptual model of general subject educational technology.
- **Second task:** to make a didactic interpretation of the methodology of Maria Montessori, characterizing all the attributes of the methodology and outlining the

possibilities for its application in the general subject technology of teaching geography in the Bulgarian secondary school at the junior high school stage.

- **Third task:** To develop specific scientific workshops, as a basis for constructing the technology of self-development in the teaching of geography in Bulgaria, for the example of the 5th grade.

In the **first chapter** of her dissertation, entitled "Theoretical foundations of the problem of educational technologies in learning", within 12 pages, the author dwells extensively on the different concepts of this concept. Good awareness of the literature sources, theoretical statements and the essence of "educational technologies" is shown, taking into account the diverse opinions and approaches to the problem. Ultimately, she accepts Petrov/Atanasova's opinion that pedagogical technology is "a modern integrative theoretical-applied science that uses theoretical generalizations and applied knowledge from the field of pedagogy and psychology, as well as from other fields and sciences to achieve educational - educational goals. Its purpose is to unite all knowledge relevant to the pedagogical activity with the aim of its practical optimization" (Petrov; Atanasova, 2001).

Further St. Misheva dwells on school technologies and learning strategies (paragraph 1.2). Here the author presents a classification of educational technologies or approaches/methods in education. Under No. 10.1. in "Prototypes" it is included and appears for the first time in the text M. Montessori as a technology of self-development. She goes on to outline the main theories of learning. It could specify again where to place the Montessori model among these theories (which also refer to the essence of modern pedagogical theories). Among the main conclusions that the author draws are that:

In essence, educational technology characterizes the modern technological paradigm, which is distinguished by its person-oriented focus and does not make a division between learning, education and development.

Educational technologies are based on the regularities of the educational process as a result of their scientific study. The technological design of this process requires precise and definite setting of the planned results, availability of criteria for their achievement, formalized structure of the activity of its main entities.

In the next, third paragraph of the First Chapter, the doctoral student pays attention and emphasizes the connection between educational technology and geography education. It relies on both the official documents and the concrete research of the specialist subject didactics in order to highlight the tasks of modern geography education in schools. Examines the steps for technology implementation, with an emphasis on DOS, goal setting, planning, resourcing, and implementation. In fact, the latest guidelines and trends in formal education, and not only, is the application of the competence approach. The strategies described by the colleague are a reflection of such an educational paradigm and expectations - that what is learned could be applied in practice, to prepare young people for the real life.

The **second chapter** of the dissertation is dedicated specifically to "The Montessori Method - a technology of self-development". Within approximately 60 pages Art. Misheva clarifies in detail the essence of the Montessori methodology, which I believe has a contributing character. It outlines the general pedagogical and psychological foundations and derives from the ideas of the great pedagogue the essential characteristics of the child's place in the educational process and the need for relevant educational strategies for his development. The child is placed in the center of attention, a modern view of the student as a subject in the educational process, who exhibits self-initiative, self-reflection and striving for self-development. Focusing on the conditions and the atmosphere in the process itself, the author of the dissertation pays attention to the communication, children's interests, interactivity and providing an optimal environment (needs, knowledge, skills) for student development. She gives concrete examples with Montessori's "Houses for Children", through which she argues the approaches to achieving the goals she set and their realization.

In the second paragraph, the dissertation focuses on the Montessori methodology itself - the working materials used, the place and role of the teacher, the development of the educational process, etc. Based on the idea that education is not only the transmission of knowledge according to the traditional method, according to the guidelines in the curriculum, but rather the monthly transmission of knowledge, developing the skills needed by the child in real life (or the so-called education to help life), Misheva examines the contributions of Montessori to reveal the individual abilities of each child during each of the stages of his life and the paths of their development.

In the third paragraph of the Second Chapter, the specific external and internal factors for the application of the Montessori methodology in geography education in our country are discussed. Among the external cultural-educational factors, the informational, scientific-theoretical, trends in the development of modern geographical science, etc., which have different degrees of influence and mechanisms of action, are indicated. The author places the educational policy of both the state and the impact of a number of EU and UNESCO documents as the basis. Among the internal factors, Misheva points out the specific normative documents defining geography education (regulations, DOS, UP), educational resources (textbooks, information products, etc.), human potential (teachers).

Last but not least, the problem of adapting Montessori's methodology in geography education is highlighted, as the goals of Italian pedagogy and those of modern Bulgarian education are brought out in a comparative plan; the emphasis on the content side, with the competence approach being the leading one; the main directions of the educational process are outlined. The author comes to the conclusion that there are many points of contact in the Montessori methodology and modern approaches and requirements in geography education in our country.

The **third chapter** in the dissertation is formulated "Basis for constructing the technology of self-development in geography education. Author's scientific workshops based on Maria Montessori's methodology. The main tasks here are to derive a model suitable for work in

geography education, based on Montessori's experience. Thus, the author believes that it will motivate the students, strengthen their desire for personal development, overcome some weaknesses in education, such as e.g. – the emphasis on the informative side, and not on the independent creative activity. Of course, it takes into account traditions, but at the same time takes into account the achievements of national and European didactics on the problem.

In order to realize the tasks set in the dissertation, Stanislava Misheva described her experience among students from basic schools (in this case 93 SU "Al. Teodorov - Balan", Sofia), with whom GGF works, and included three workshops based on the methodology of Montessori. These are: 1. Land construction. Tectonics; 2. Relief - external forces; 3. Relief - internal forces. The workshops are prepared according to a preliminary model and scenarios (goals, expected results, participants, materials, activities, results, as well as risk analysis), which allows more objective assessment of the students' final achievements. The course of each workshop and the activities carried out are described specifically according to the presented model. The doctoral student described the participants (73 5th grade students) as well as the control group where the Montessori method was not applied. As a novelty, we must point out the adaptation of the workshop to the possibilities of STEAM education with the idea of obtaining maximum applicability of the presented workshops/activities.

In order to accomplish her project, the doctoral student takes into account the most essential indicators of the Montessori method (surrounding environment, participants - students, work materials, as well as the role of the teacher as a mediator in the process). As the main methods for the analysis of the experiment are the observation, the survey (QBS - questionnaire to students and parents), which are included in the appendices. A computer statistical analysis was made for the processing of the data, through which the final results were derived. Graphs are included for each of the indicators, which give a visual example of what has been achieved.

I think that the PhD student did a very good job here. This chapter of her work shows that the suggested approach is undoubtedly applicable in the teaching practice. She herself reports that the use of the Montessori method and the achievements of modern didactics and other sciences related to education have a positive effect on adolescents in terms of not only motivation, but especially for the formation of competencies needed in practice.

The main contributions in the dissertation are clearly stated by the author in the conclusion and the abstract, which I accept:

Technology as a theory and methodology has been researched, on the basis of which a conceptual model of general subject educational technology of geography education has been derived.

A new approach to examining the Montessori methodology is proposed - as a technology of self-development in geography education, justified by trends in the modern development of geography didactics.

Based on the ideas of the methodology of Maria Montessori, a new structure of methodological development of the geography lesson, applicable in the practice of education, was constructed.

Specific methodological developments of scientific workshops with up-to-date educational content from the geography and economics curricula for junior high school are proposed. Scientific workshops enable their adaptation to STEAM technology training as well.

Conclusion: The overall analysis of the presented dissertation work as well as the publications of Stanislava Misheva included in the documentation, related to the procedure for acquiring the educational and scientific degree "doctor" give me reason to claim that the dissertation student has successfully coped with the assigned tasks. In conclusion, I would like to emphasize that the dissertation meets the criteria for original and serious scientific research, and I will vote positively.

06.03.2023

Prof. Dr. Kr. Tabakova,

1.3. History teaching methodology