

## OPINION

by competition for the occupation of the academic position of "associate professor" on "Methodology of teaching mathematics in preschool age" in the field of higher education 1. Pedagogical sciences professional direction 1.3. Pedagogy of training in .... announced in the State Gazette, issue 88/20.10.2023  
Prepared the opinion: Prof. Marina Koleva Nikolova PhD (Technical University-Sofia; Faculty of Engineering and Pedagogy-Sliven); No. in the Register of the National Center for Information and Documentation 46656

In the announced competition for the occupation of the Academic position of "associate professor" in "Methodology of teaching mathematics in preschool age", in the field of higher education 1. Pedagogical sciences, professional direction 1.3. Pedagogy of training in ..., one candidate participated - doctor of pedagogy Yordanka Deneva Ilieva.

### **1. Biographical data of the applicant:**

#### **1.1. Education.**

Yordanka Ilieva graduated from the "Konstantin Preslavski" Higher Pedagogical Institute in 2002. Subsequently, additional courses enriched her qualification in the specialty. These are: in 2002 at the "Step by Step" Foundation, Sofia - trainer for the "Shoumen Region - Multi-Ethnic Education Center" project; in 2012, the course "Aggression of preschool children" - Shumen University "Bishop Konstantin Preslavski"; 2013 "Road Safety Training Methodology" - Department of Information, Qualification and Supporting Education - Varna; 2014 "Introduction to the Civil Service" - Institute of Public Administration - Sofia; 2015 "Work of the kindergarten with the family", "Organization of the child-oriented educational environment" and "Music therapy" in the Department of Information, Qualification and Supporting Education (Varna); 2016 "Safety Code" course; "Preparation and training of children and kindergarten staff in safe behavior in disasters and accidents".

In 2018, she defended her dissertation on the topic "Didactic-technological model for mastering key competencies by 5-7 year old children in the process of

comparing and measuring quantities" on the Methodology of Teaching Mathematics and Informatics (in Kindergarten) at Shumen University "Bishop Constantine of Preslavski".

#### **1. 2. Professional development.**

The candidate has an impressive track record as a teacher. In the profession, she has been working since October 1993 in various full-day kindergartens in the city of Shumen, and later as a senior teacher. From January 2014 to September 2014, as a senior expert in preschool education in the Regional Department of Education - Shumen.

Until 2016, Y. Ilieva was a part-time assistant in "Methodology of formation of elementary mathematical ideas in kindergarten" at "Bishop Konstantin Preslavski" Shumen University.

From 01.03.2022 to the present, he is the main assistant in Mathematics Teaching Methodology at preschool age at Thrace University - Stara Zagora, Faculty of Pedagogy.

#### **2. Research activity and contributions.**

In the competition for "associate professor", the candidate has submitted a set of materials for participation in the procedure, which are in accordance with the Law on the Development of the Academic Staff in the Republic of Bulgaria. The documents are well formatted and organized. References and lists contain the necessary information, among which the most important documents are: Diploma for Educational Scientific Degree "Doctor"; List of publications for participation in the contest; Reference for the fulfillment of the minimum national requirements under the Law on the Development of the Academic Staff in the Republic of Bulgaria. Reference for the citations with a full bibliographic description of the cited and citing publications; summary of works for participation in the competition and others.

The scientific texts with which Doctor Yordanka Ilieva participated in the competition for the academic position of "associate professor" are distinguished by: topicality of the issues being developed; diversity of research approaches used; demonstrating the professional competence of an excellently prepared methodology; outlining the applicant's in-depth scientific interests in the field of the competition.

he scientific publications submitted for participation have not been used in previous procedures.

The main habilitation thesis - monograph "STEAM workshop "Mathematical Kaleidoscope" in kindergarten", (University Publishing House Shumen University "Bishop Konstantin Preslavski". Shumen. ISBN 978-619-201-736-1. 2023.) is structured in four parts. The first part contains a theoretical overview and analysis of the topic. In the epicenter of the reflections, special attention is paid to the interdisciplinary STEAM approach. In the second part of the monograph, the author's model for the STEAM workshop "Mathematical Kaleidoscope" in the kindergarten was developed. Structurally, it contains five main modules, which are discussed in detail.

The author's model presented by doctor Yordanka Ilieva is of a prominent practical-applied nature and builds a connection between the calls in Bulgarian education and the new perspectives facing the education of children in kindergarten. It is not an abstract, but a fully working model, tested in "field" work, and this is presented in the third part of the monograph. Particularly valuable are the presented author's games and situations in which the STEAM approach is embedded.

Particularly valuable are the presented author's games and situations in which the STEAM approach is embedded.

In the fourth part of the paper, an analysis of the results obtained from the application of the author's model in working with kindergarten children is made.

The scientific production presented by Doctor Ilieva meets the minimum national requirements for holding the academic position of "associate professor".

In addition to the habilitation work, the candidate has also submitted a book based on a protected dissertation work for the award of the Educational and Scientific Degree "Doctor".

According to indicator D of the minimum national requirements, articles and reports, publication in scientific publications, referenced and indexed in world-renowned databases with scientific information, the candidate has submitted an article "The role of productive educational technologies for the formation of mathematical competence in 5-7-year-old children".

To Articles and reports published in non-refereed peer-reviewed journals or published in edited collective volumes, Dr. Ilieva presents 11 articles. They were issued in the period five in 2023, two in 2022 and 2003, one in 2001 and 2005.

According to indicator D – the candidate has submitted two citations in scientific publications, referenced and indexed in world-renowned databases with scientific information; five citations in monographs and collective volumes and four citations in non-refereed journals.

With the scientific production presented in this way, Dr. Ilieva not only fulfills the minimum national requirements for occupying the academic position of "associate professor", but also exceeds the required points.

### **3. Scientific contributions.**

I accept the scientific contributions formulated by doctor Y. Ilieva.

### **4. Conclusion.**


Based on my familiarity with the scientific production presented by the candidate and the scientific contributions found in them, I declare my categorically positive assessment of the opinion on the appointment of the academic position "associate professor" announced by the competition by Doctor Yordanka Deneva Ilieva.

My assessment is also substantiated by the adequacy of the documentation submitted by the candidate in accordance with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria

The Regulations for its implementation and the corresponding Regulations at Thrace University - Stara Zagora.

The achieved scientific-theoretical and scientific-applied results give me reason to confidently recommend to the members of the esteemed Scientific Jury to give a positive assessment to the candidacy and to propose to the Faculty Council of the Faculty of Pedagogy at Thrace University - Stara Zagora to elect Doctor Yordanka Deneva Ilieva for " associate professor" in the field of higher education 1. Pedagogical sciences, professional direction 1.3. Pedagogy of teaching ("Methodology of teaching mathematics in preschool age").

20.02.2023  
City of Sliven

Prepared the opinion:   
(Prof. Marina Nikolova PhD)