

OPINION

by Associate Professor Gabriela Georgieva Kiryakova, PhD
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for the materials submitted for participation in the contest for the academic position
"Associate professor" at the University of Plovdiv „Paisii Hilendarski“

Area of higher education: **1. Pedagogical sciences**
Professional field: **1.3. Pedagogy of training in ...**
Scientific specialty: **Methodology of training in information technologies
and working in a digital environment**

In the contest for the academic position “associate professor” announced in the State Gazette No. 39/02.05.2023 and on the website of the University of Plovdiv „Paisii Hilendarski“ for the needs of the Department of Primary School Pedagogy at Faculty of Education, as a candidate participates chief assistant professor Vilislav Ivanov Radev, Ph.D.

1. General presentation of the procedure and the candidate

With Order № ПД 21-1418/30.06.2023 of the Rector of the University of Plovdiv „Paisii Hilendarski“ I am determined for a member of the scientific jury in a contest for the academic position “associate professor” in the area of higher education 1. Pedagogical sciences, professional field 1.3 Pedagogy of training in ..., Scientific specialty Methodology of training in information technologies and working in a digital environment announced for the needs of the Department of Primary School Pedagogy at Faculty of Education.

One candidate has submitted documents for participation in the announced contest – chief assistant professor Vilislav Ivanov Radev, Ph.D. from the Department of Primary School Pedagogy at the Faculty of Education. The submitted set of materials **corresponds** with the Regulations for the development of the academic staff of the University of Plovdiv „Paisii Hilendarski“.

The candidate Vilislav Radev has obtained a Bachelor's degree in the specialty "Mathematics and Informatics" with the qualification of Teacher of Mathematics, Informatics, and Information Technologies, a Master's degree in the specialty "Business Informatics with English" and a Ph.D. degree in the area of higher education: 1. Pedagogical Sciences, professional field 1.3. Pedagogy of training in ..., doctoral program “Methodology of training in informatics and information technologies” from the University of Plovdiv „Paisii Hilendarski“, Faculty of Mathematics and Informatics. He has been working as an educator at the same university since 2010 – initially as a part-time assistant, and then successively held the positions of assistant and chief assistant.

The candidate meets the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its implementation, and the relevant Regulations of the University of Plovdiv „Paisii Hilendarski“. It is clear from the provided

reference that chief assistant professor Vilislav Radev covers the minimum required points by groups of indicators – the actual number of points of the candidate is 645, which exceeds the required 400 points. There is a similar situation related to the additional requirements of the Faculty of Education in connection with participation in a contest for the academic position of "associate professor". The candidate exceeds the required number of points in both research and teaching activities.

The procedure of the contest for the academic position "associate professor" has been followed. The documents and materials presented by chief assistant professor Vilislav Radev meet the minimum national and additional requirements of the Faculty of Education of the University of Plovdiv „Paisii Hilendarski“.

2. General characteristics of the candidate's activity

Educational and pedagogical activity

Chief assistant professor Vilislav Radev has developed curricula and conducts lectures and practical exercises in the subjects "Information and communication technologies in training and working in a digital environment", "Mathematics 1 part", and "Mathematics 2 part" with students obtaining bachelor's degree and "Alternative technologies in a digital environment", "Information and communication technologies in training and working in a digital environment" and "Methodology of training in computer modeling" with students obtaining master's degree.

Chief assistant professor Vilislav Radev was the academic supervisor of successfully defended graduates whose topics of the thesis were related to the application of information technologies in education.

The candidate took part as an academic mentor in the projects "Student Practices – Phase 1" and "Student Practices – Phase 2".

Scientific activity

The presented scientific production is classified into three thematic areas by the candidate Chief assistant professor Vilislav Radev: *use of information and communication technologies in education and creation of auxiliary digital resources in mathematics at the primary stage of education and preschool age, application of information technologies in learning in the virtual classroom with the help of electronic textbooks and development of mathematical competences in discrete mathematics with the help of information technologies.*

Chief assistant professor Vilislav Radev has submitted the following materials:

- Monographs – 1;
- Published book based on a Ph.D. thesis for awarding the educational and scientific degree "doctor" – 1
- Publications – 12.

In the monograph "Some applications of block programming in the teaching of mathematics in the second grade", chief assistant professor Vilislav Radev has included a collection of game models that focus on applications of block programming in second-grade mathematics education. The author has designed a prototype of an educational software package of animated modules for learning mathematics in second grade using the Scratch

block programming language. The pedagogical characteristics of the implemented animated modules are discussed, and the corresponding scenario and technological implementation are presented. An experimental study's results are presented, proving the effectiveness of the proposed methods in teaching mathematics in the second grade.

The second monograph, "Studying discrete mathematics with the help of information technologies", is included in the group of indicators Γ Published book based on a Ph.D. thesis for awarding the educational and scientific degree "doctor". The author presents modern trends in the development of mathematical competencies in discrete mathematics with the help of information technology. Chief assistant professor Vilislav Radev has discussed issues related to a methodological toolkit for the visualization of solutions to various tasks in discrete mathematics. The author has created different examples and tasks using various software products.

The scientific publications of chief assistant professor Vilislav Radev are related to the application of information technologies in teaching mathematics in the primary stage of education and preschool age, emphasizing the use of the specialized Scratch software. Among his research interests is the development of animated scenarios for teaching different topics of educational content. Chief assistant professor Vilislav Radev also examines issues related to the use of electronic textbooks, focusing on their preparation and the organization of the lesson and the learning process, as well as learning through a virtual classroom and its advantages in e-learning.

The scientific publications of chief assistant professor Vilislav Radev have been published in proceedings of conferences held abroad (3 papers) and in Bulgaria (3 papers), as well as in scientific journals (5 papers) and yearbooks (1 paper). Some publications are referenced and indexed in world-famous databases with scientific information.

Chief assistant professor Vilislav Radev has formulated his main scientific contributions according to the thematic areas of his publications, and the following should be highlighted:

- An investigation of the application of modern information technologies and educational software products to teach mathematics in primary school for more effective achievement of educational goals.
- A study of the modern trends for the development of mathematical competencies in discrete mathematics with the help of information technologies.
- A system and technology have been developed for learning mathematics by applying information technologies in creating educational games for acquiring new knowledge in primary school.
- A software package of animated modules has been created based on the teaching content of mathematics in primary education.
- A technological option for using Scratch when creating educational games for acquiring new knowledge in kindergarten has been developed.
- A LogicalCircuits combinational circuit builder has been developed to represent Boolean functions for educational purposes.

The candidate's personal contribution is visible. In all publications, with the exception of one submitted for participation in the contest, chief assistant professor Vilislav Radev is the single author. All scientific papers reflect the results of his research work.

Chief assistant professor Vilislav Radev has submitted 22 citations for participation in the contest – 7 are in scientific publications, referenced and indexed in world-famous databases.

Participation in projects

Chief assistant professor Vilislav Radev was part of the team of 6 research projects at the Scientific Research Fund of the University of Plovdiv „Paisii Hilendarski“.

Based on the presented facts, it can be concluded that chief assistant professor Vilislav Radev has the necessary teaching experience and is engaged in activities with students. The presented scientific production is proof of quality research activity. There are pieces of evidence that the results of the research of chief assistant professor Vilislav Radev are known to a broad scientific audience. He participates in the contest with a production that exceeds the minimum national requirements and the additional requirements for a candidate for the academic position of “associate professor” at the Faculty of Pedagogy of the University of Plovdiv „Paisii Hilendarski“.

3. Critical remarks and recommendations

I don't have any critical remarks on the documents submitted to the contest. I recommend the candidate to publish the results of his research activity in journals with an Impact Factor or Impact Rank to achieve wider dissemination and visibility.

CONCLUSION

The documents and materials submitted by chief assistant professor Vilislav Radev **meet** all the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for its implementation, and the relevant Regulations of the University of Plovdiv „Paisii Hilendarski“.

The candidate in the contest has submitted a **sufficient** number of scientific works published after the materials used in the defense of the Educational and Scientific Degree “Doctor”. The scientific and teaching qualification of chief assistant professor Vilislav Radev is **undoubted**.

The results achieved by chief assistant professor Vilislav Radev in the teaching and research activities **fully comply** with the minimum national and the specific requirements of the Faculty of Education of the University of Plovdiv „Paisii Hilendarski“.

After getting acquainted with the materials and scientific works presented in the contest, analysis of their significance, and the containing contributions, I find it reasonable to give **my positive evaluation** and **propose** to the honorable Scientific Jury to prepare a report-proposal to the Faculty Council of the Faculty of Education for the election of chief

assistant professor Vilislav Ivanov Radev, Ph.D. for the academic position “associate professor” at the University of Plovdiv „Paisii Hilendarski“ in area of higher education 1. Pedagogical sciences, professional field 1.3 Pedagogy of training in ..., Scientific specialty Methodology of training in information technologies and working in a digital environment.

23.08.2023

Member of the Scientific Jury:
/Assoc. Prof. Gabriela Kiryakova, PhD/