#### **OPINION**

by Prof. Dr Marinela Velikova Mihova, VTU "St. St. Cyril and Methodius" for the works of Dr. Lyubka Krasteva Aleksieva in connection with participation in a competition, declared in the DV 93 / 26.11.2019.

for the academic position "Associate Professor" in Field of higher education 1. Pedagogical sciences; Professional field 1.3. Pedagogy of Mathematics and Information in Primary Education (for the needs of the Faculty of Educational Studies and the Arts)

There is only one candidate in the announced competition for occupation of the academic position "Associate Professor" in the field of higher education 1. Pedagogical sciences; professional field 1.3. Pedagogy of Mathematics and Information Technology in Primary Education (for the needs of FESA) there is only one candidate.

# I. Summary of the applicant's activities and scientific output Applicant general information

Dr. Lyubka Aleksieva was born on December 24, 1981. She is a Bachelor of Primary Education with English as a Foreign Language and a Master of Information Technology in Primary Education from Sofia University "St. Kliment Ohridski". In 2014 she obtained the Doctorate degree in education and science as a result of a successfully defended dissertation on "Instructional Potential of Educational Software in Mathematics Education".

The candidate's professional biography as a lecturer at the Faculty of Education and Arts Sciences at Sofia University "St. Kliment Ohridski" started in 2010 as part-time assistant, and since 2011 as a full-time assistant in the field of Methodology of training in information technology. Since 2015 she has been Chief Assistant on Pedagogy of mathematics and information technology training.

Dr Lyubka Aleksieva is constantly improving herself. She has several specializations in specific areas of integration of information technology into training, which build her as a competent specialist and researcher. Acknowledgment for her professionalism is her election as a member of the Expert Council of the Distance Learning Center of Sofia University "Kliment Ohridski".

### **Teaching activity**

The teaching activity of Dr Lyubka Aleksieva includes lectures, seminars and practical training at Bachelor's and Master's degrees in subjects, which are mainly in the two fields of Mathematics in Primary Education and Didactics of Information Technology.

Dr Lyubka Aleksieva is a young and innovative teacher who not only explores the pedagogical capabilities of technologies but also actively integrates them into her teaching.

From 2017-2018 she is an online content teacher and designer in one of the courses of the first accredited distance learning program at Sofia University "St. Kliment Ohridski"- the program "Information and Communication Technologies in Education" of the Faculty of Pedagogy.

One of the important activities of a university professor is to work with students and to motivate them to engage in research. Dr Lyubka Aleksieva is such a teacher. Her joint publications with students and her team project work with PhD students improve this.

### **Project activity**

Dr Lyubka Aleksieva actively participates in project activities. So far, it has participated in 15 projects - 4 international and 11 national. The positions she holds are different - as researcher, coordinator, facilitator, trainer.

## **Scientific production**

Dr Lyubka Aleksieva has submitted 20 publications for participation. The distribution of publications with which the candidate participates in the competition by type and volume is as follows:

N	Type of publication	Authorship		Language			Number of publication
		Authors hip	Co- author ship	BG	UK	Russian	
1	B 3- habilitation	1		1			1
	$\Gamma$ 5. A book published on the basis of a dissertation thesis for the award of a doctoral degree	1		1			1
	Γ 6. Articles and reports published in scientific publications, referenced and indexed in world-renowned scientific information databases	2	8		10		10
	Γ 7. Articles and reports published in non-refereed scientific peer-reviewed journals or in peer-reviewed collective volumes	1	5	6			6
2	Γ 9. Studies published in non- refereed scientific peer- reviewed journals or in peer- reviewed collective volumes	2		2			2
	Total	7	13	10	10		20

The thematic focus of the publications with which Dr Lyubka Aleksieva participates in the competition, corresponding to the thematic direction of the competition. The presented scientific production is sufficient in type and volume for participation in the competition.

# **Quotations**

In the Minimum National Requirements Reference, the applicant cites 15 citations to eight publications in scientific publications, referenced and indexed in world-renowned scientific information databases (Web of Science, Scopus,

EBSCO) and one citation in a non-refereed scientific peer-reviewed journal. The amount is sufficient to cover the relevant section in the scientometric indicators. In quantitative terms the candidate covers the minimum scientific requirements under Art. 2b of the ZRASRB:

Group	Point
Group A	50
Group B	100
Group Γ	270.16
Group Д	230
Total	650.16

The publications of Dr Lyubka Aleksieva - monographs, studies, scientific articles, reports define her as a specialist with a clearly defined, specific scientific interest.

## II. Evaluation of scientific and practical results and contributions

Among the publications on the topic of the competition is the monograph "Electronic Resources in Elementary Education". By its nature, the study is theoretical and empirical. A critical analysis of various studies related to eresources and their integration into training has been carried out and a survey has established the attitudes, practices and competences of primary teachers to work with e-resources.

The research is valuable with the following achievements:

- Defining the term 'electronic learning resource', which brings clarity to the concept;
- A critical evaluation of the integration of electronic resources in the learning process, enabling objectively perceived positives and disadvantages of this type of didactic tools;

- Formulation of groups of criteria for assessing the quality of eresources to assist teachers in their selection;
- Summarizing the three most typical practices in the use of e-resources, which provides clarity on didactic reality in contemporary schools;
- Development of an authoritative competence model for the work of primary teachers with electronic resources, subject to the modern professional profile of the teacher;
- Examining the attitudes, attitudes and competences of primary teachers to use e-resources in primary school education, drawing on the empirical data they have gathered that outline the real-world picture and trends of e-learning in the initial educational stage;
- Formulating recommendations for changes in the curricula of the teacher-training majors, which will be the basis for changes in traditional teaching practices.

The second significant focus of Dr Lyubka Aleksieva's scientific interest is on the study of electronic evaluation and participants' confidence in this process. Research in this area is part of the Horizon 2020 international project. The topic is relevant and relevant, but not sufficiently researched and popularized, especially in Bulgaria. These studies should be promoted and provoke not only debate, but lead to real steps related to sanctioning for proven borrowing and lack of academic integrity in completing homework and evaluating them.

The candidate's research interest in integrating ICT into teaching, and in particular mathematics training, has been refined in a number of publications related to multimedia training, blended learning, e-learning content and European and national education policy regarding teachers' digital competence. These publications either propose author models or summarize and present personal teaching experience, which makes the findings, conclusions and recommendations compelling and workable.

Each of the publications with which Dr Lyubka Aleksieva participated in the competition makes an impression with a high degree of academicism and scientific thoroughness. The selected topics are relevant, relevant, developed in a theoretical as well as applied context with a clear author position.

I agree with the contributions that Dr Lyubka Aleksieva has summarized in the competition documents. Here I will emphasize more generally some of them:

- 1. An in-depth, multifaceted theoretical and empirical study of the integration of electronic resources in mathematics education in elementary grades has been made. The research serves both the school didactic practice and the academic preparation of future teachers.
- 2. A comprehensive pedagogical profile of the instructional multimedia has been made to improve the teaching of mathematics by creating and proposing an author's model for the study of table multiplication and division using instructional multimedia.
- 3. The system of publications explores the phenomenon of electronic evaluation regarding the impact of authentication and authorship technologies in its conduct.
- 4. The quality of e-learning in terms of accessibility of e-content and the readiness, attitudes and competences of primary teachers for online teaching were examine.

#### III. Conclusion

The presented scientific production meets the minimum national requirements and corresponds to the academic position of "Associate Professor" in volume and quality. I am convinced that there are all the grounds Dr Lyubka Aleksieva to be elected Associate Professor in the Field of higher education 1. Pedagogical Sciences; Professional field 1.3. Pedagogy of mathematics and

Educational Studies and the Arts.	
10.03.2020	
	Prof. Marinela Mihova PhD

information technology in Primary Education for the needs of the Faculty of