

## STATEMENT

of

Prof. Venka Petrova Kuteva - Tsvetkova, DSc

Member of a scientific jury

In a competition for the academic position “professor”  
at Sofia University “St. Kliment Ohridski”

**Field of higher education:** 1. Pedagogical sciences.

**Professional field:** 1.2. Pedagogy (Special Pedagogy)

**Faculty of Educational Studies and the Arts**

**Department:** Special Pedagogy and Speech Therapy

**Issued:** State Gazette, No 48/26.05.2020.

**Candidate for the competition:** Assoc. Prof. Milen Zamfirov Zamfirov, DSc, lecturer at the Department of Special Pedagogy and Speech Therapy in the Faculty of Educational Studies and the Arts at Sofia University “St. Kliment Ohridski”.

**I. Data for the competition.** The competition for the academic position “professor” at Sofia University “St. Kliment Ohridski” - Faculty of Educational Studies and the Arts, has been announced in the State Gazette No. 48 of 26.05.2020. All requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria have been met. Assoc. Prof. Milen Zamfirov Zamfirov is the only candidate in the competition.

### **II. Data for the candidate participating in the competition**

Assoc. Prof. Milen Zamfirov was born in 1975.

He has a higher education - bachelor degree in Physics at South-West University “Neofit Rilski” - Blagoevgrad, bachelor and master’s degree in Special Pedagogy at Sofia University “St. Kl. Ohridski”. He also has a master’s degree in mathematics and informatics at Sofia University “St. Kl. Ohridski”.

He started his professional career as a teacher. He works in various educational institutions.

The beginning of his academic career is in 2009 as a senior assistant at Sofia University “St. Kliment Ohridski”. In 2011 he was already a chief assistant,

and since 2013 he has been working as an associate professor on an employment contract under Art. 67, Para. 1, item 1 of the Labour Code.

In 2009 he received the educational and scientific degree of Doctor with a dissertation research on “Improving the process of teaching hearing-impaired children in the subjects Man and Nature for 5th and 6th grade and Physics and Astronomy for 7th and 8th grade”.

In 2017 he became a Doctor of Science with the topic “Development and implementation of computer-assisted learning for students with special educational needs in mathematics”.

Assoc. Prof. Milen Zamfirov holds various administrative positions. He is the coordinator of the Doctoral School at the Faculty of Educational Studies and the Arts, coordinator of EEA GRANTS for the Faculty of Educational Studies and the Arts, head of the University Center “Academy for Children” at Sofia University “St. Kliment Ohridski”, Center for Support of Foreign Students. He is a member of the Social and Household Commission of Sofia University.

He is a member of a significant number of working groups and commissions - a commission for drafting the Statute of the Doctoral School of the Faculty of Educational Studies and the Arts, a commission for preparation of the necessary information in connection with the forthcoming institutional accreditation of distance learning at Sofia University, for preparation of a report - self-assessment for accreditation of doctoral programs for acquisition of educational scientific degree Doctor in professional field 1.2. Pedagogy, commissions for conducting candidate-doctoral exams, for development and implementation of a modern educational center for animation, consulting and support of children of teachers and employees of Sofia University, commission for preparation of a concept for optimization of the activities and processes in Sofia University “St. Kl. Ohridski” through a unified information system, of an expert group for program accreditation of professional field 1.2. Pedagogy at Plovdiv University “Paisii Hilendarski” and others.

Since November 2019 he has been a Dean of the Faculty of Educational Studies and the Arts at Sofia University “St. Kliment Ohridski”.

He has 22 years of work experience.

He participates in 11 international, national, university and educational projects.

He participates in numerous forums in the country and abroad as a lecturer and expert. Since 2014 he has been leading training courses for obtaining a

professional qualification degree in Special Pedagogy and Information Technologies at the Department of Information and Improving Teachers.

He is a member of three international editorial boards.

The citations mentioned in the documents are completely sufficient.

Has 6 diplomas for the award.

### **III. Description of the scientific works with which the candidate participates in the announced competition**

Assoc. Prof. M. Zamfirov participates in the competition with a total of 13 publications. They are presented as follows – 3 monographs, 10 articles and reports published in scientific journals, referenced and indexed in world-famous databases of scientific information.

In addition, he presented a list of all publications, inventions and other scientific-applied results as an “associate professor”.

The monograph “*Application of the classical approach of Jean Piaget in the Bulgarian inclusive education*”. Sofia, 2019, p. 160, ISBN 978-619-91067-3-0, COBISS.BG-ID-1291175140 is aimed at supporting both groups involved in the process of work and training of talented students and students with Special Educational Needs (SEN) - the general education and resource teacher. A model is proposed that would assist the general education teacher in his/her assessment of how to approach the learning process most effectively in the classroom, which has both a student with SEN and a talented student.

The methods described in the monograph are applicable to students at risk and with chronic diseases. This makes room for the model as an applicable solution for inclusive education.

With the help of this model, the specific intellectual level of a student can be determined, based on Piaget’s phenomena, Binet-Simon’s intelligence test and Manova-Tomova’s ladder.

In the monograph “*Theory and methodology of teaching computer modelling and information technologies for students with special educational needs*”, 2010, Sofia, p. 156, ISBN - 978-619-91067-2-3, COBISS.BG-ID – 1292592100 are considered variants of computer modelling and some author’s computer programs that would be useful for students with learning disabilities in the cultural and educational field of Mathematics, Informatics and Information Technologies.

Through mathematics and information technologies are created available for mass use methods and tools for presentation, analysis, interpretation and

transmission of data, which fit perfectly into the educational process in mathematics. The development and implementation of innovative didactic concepts based on the use of technologies is a condition for improving the learning process in mathematics. A kind of continuation of the dissertation for the degree of Doctor of Science is the monograph *“Information and communication technologies in teaching and working in a digital environment for students with SEN”*. University Press Sofia University “St. Kliment Ohridski”, 2019, Sofia, p. 176, ISBN 978-954-07-4696-8, COBISS.BG-ID - 1290809060.

The advent of computer technologies from the beginning of the 21st century is headlong: various operating systems, office suites, Internet services, fast hardware. Therefore, more and more disciplines are entering the educational process, advocating education in the field of information technologies, both at the university level and already at all levels at the school level. There is no school in Bulgaria that is not equipped with state funding programs, with at least one computer room. There are often schools, especially secondary schools, with several computer rooms. But hardware is often ahead of software, especially when it comes to teaching different disciplines in school. Training in information technologies in school alone is no longer enough. The educational environment requires and seeks more and more specialized developments to meet the needs of students for new and diverse technologies in almost every educational subject.

The monograph is dedicated to the study of the relationship between information technologies and their impact on the level of achievement in mathematics by students with special educational needs.

*Zamfirov, M. Application of Jean Piaget’s cognition development tasks on students with Special Educational Needs. European Journal of Special Education Research ISSN: 2501 - 242, Volume 5, Issue 2, 2019 doi 10.5281/zenodo.3556948*

The article presents a correlation model based on Piaget’s phenomena and its application in students with SEN. Approaches are described that provide an opportunity to determine the cognitive age by applying the experiments of J. Piaget, as well as the reverse process - using the stages of development of Piaget to determine the IQ of the individual student. The proposed model can help general education teachers and personal development support teams in schools in their rapid orientation in the capabilities of students with special educational needs and the development of individualized programs that encourage and support their development.

*Zamfirov, M. Educational Policy in the Classical Approach of Jean Piaget in Bulgarian Inclusive Education. Journal of Educational and Scientific Policy Strategies. Book 1, 2020*

The article proposes a tested model that would support the implementation of an effective educational policy in general education schools. It would also assist general and resource teachers in their assessments of how to approach the learning process most effectively in a classroom with a student with special educational needs. Through this model, based on Piaget's phenomena, the specific intellectual level of a student can be determined. The proposed model was experimentally tested among 56 children and students, and the results are described in the article.

*Zamfirov, M. Correlation of the performance of the tasks for cognitive development of Jean Piaget with the indicator of mental age Binet- Terman in students with special educational needs. Journal of Pedagogy, book 6, 2019*

The article presents a correlation model based on Piaget's phenomena and a Binet-Terman intelligence test. Approaches are indicated in which the mental age can be determined by conducting the experiments of Jean Piaget, and vice versa - by determining the stage according to Jean Piaget to determine the IQ of the subject. The proposed model would allow the general education teacher, as well as the support team for personal development in the school, to easily navigate the abilities of the student with SEN and to develop individual programs adequate to his development.

*Zamfirov, M. Trends in the classification of persons with mental retardation. Vocational Education Magazine. Book 1, 2020.*

The article presents the historical trends in the development of the classification of mental retardation. An overview of the various revisions of the International Classification of Diseases has been made. A comparison was made between the different classifications of mental retardation.

Assoc. Prof. M. Zamfirov is the author of several publications dedicated to the inclusion and work with talented children (*Methodological Approach for Identifying Talented Students in Science Through the Phenomena of Jean Piaget and the Binet-Terman Intelligence Test. Chemistry: Bulgarian Journal of Science Education. Natural sciences in education, Volume 28 Number 3, 2019; Piaget's Approaches to Identifying Talented Students in Science, World of Physics Journal, Book 1, 2019; Identifying Gifted Students in Mathematics through Jean Piaget's Phenomena, Journal of Mathematics and Informatics, Volume 61, Number 6, 2018*).

Assoc. Prof. M. Zamfirov dedicates a number of publications to the difficulties of students with SEN in building mathematical skills.

Also of interest are the publications dedicated to the education and inclusion of students with SEN in different countries.

Assoc. Prof. M. Zamfirov is the author of a significant number of articles that focus on various topics of pedagogical theory and practice.

#### **IV. Contributions**

The contributions in the main works of Assoc. Prof. M. Zamfirov, which are after his election as Associate Professor in 2013, reflect the author's research. His publications have a special focus on important aspects of *special pedagogy and information and communication technologies in the work of children and students with SEN*.

##### **Contributions of scientific and theoretical nature**

###### **In the field of Special Pedagogy**

A methodological approach for the assessment of students with special educational needs by applying the classical approach of Jean Piaget is presented. Jean Piaget's tasks for cognitive development are correlated with the Binet-Terman mental age index.

A model for assessment of mentally retarded persons has been implemented through the ladder of Vasilka Manova-Tomova.

The proposed model has been experimentally tested among children and students with various disorders.

The cognitive characteristics of mathematics in mentally retarded students, visually impaired students and students with hearing impairment were compared.

The expected results in mathematics in primary education are specified for mentally retarded students compared to the hierarchical levels according to D. Krathwohl, for visually impaired students compared to the hierarchical levels according to Pierre van Hiele and for students with hearing impairment compared to the hierarchical levels according to R. Marzano.

###### **In the field of information and communication technologies in the work of students with SEN**

The current state in the field of the problem under consideration is studied. A review of the policy of computer training of students with SEN, both in Bulgaria and worldwide has been conducted.

Hierarchies of cognitive skills have been established for mentally retarded students, visually impaired students and students with hearing impairment in relation to the goals in the training in information technologies and computer modelling in primary education.

The expected results in information technologies and computer modelling in primary education for students with mental retardation, visual impairment or hearing impairment are specified in relation to the hierarchical levels according to B. Bloom.

The relationship between information technologies and their influence on the level of achievement in mathematics of students with SEN has been studied.

### **Contributions of an applied nature**

Designed, developed and implemented in a number of Bulgarian hospital, special and general educational schools and day-care centers specialized software that meets basic criteria for training students with SEN.

A new model for modelling (design and development of software through a semantic memory model) of specialized software for training students with SEN has been developed. The modified model of **RLN** allows software developers for students with SEN, accessibility and at the same time to be in the context of software development.

New free specialized software for training students with SEN in mathematics has been designed, modelled and developed for:

- First grade - in Bulgarian, in English and as a web-based version;
- Second grade - in Bulgarian, in English and as a web-based version;
- Third grade - in Bulgarian, in English and as a web-based version;
- Fourth grade - in Bulgarian.

A cross-platform solution has been developed for the specialized software for teaching students with SEN in mathematics, working seamlessly on Windows, Mac OS and Linux platforms. This ensures maximum user access to it, regardless of the operating system used.

Computer training of students with SEN has been implemented, applying the developed specialized software, in several schools for more than six years.

A multivariate analysis of the results of the external assessment of students' achievements (experimental group and general population) in mathematics in 4th

grade (end of the primary stage) for 2008, 2009, 2010 and 2011 was performed. The results show that in a specifically designed and programmed software product, the results of the students trained in it are on the rise.

## **V. Teaching and research activities**

Assoc. Prof. M. Zamfirov has full schedule of hours in the Faculty of Educational Studies and the Arts at Sofia University “St. Kliment Ohridski”.

His main activities and responsibilities are related to working with students in bachelors, masters and doctoral programs in the field of Special Pedagogy.

He has the following lecture courses in bachelor programs - Information and communication technologies in teaching and working in a digital environment, Methodology of teaching mathematics to students with SEN, Methodology of teaching science and ecology for students with SEN, Methodology of teaching computer modelling and information technologies for students with SEN, Formation of skills for project development.

He advises students and doctoral students on their diploma theses and projects, as well as teachers on various theoretical and practical issues.

He is the supervisor of 7 successfully defended doctoral students.

His scientific and professional interests are in the field of Special Pedagogy, information and communication technologies in working with students with SEN, methodology of teaching science in students with SEN.

## **VI. Conclusion**

The candidate in the announced competition, Assoc. Prof. Milen Zamfirov Zamfirov, meets the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations on its implementation.

The works and publications proposed by Assoc. Prof. Milen Zamfirov have the necessary scientific qualities, evidence and contributions that are required for such procedures.

**Based on the data from this Statement, I recommend Assoc. Prof. Milen Zamfirov Zamfirov to be elected to take the academic position “professor” regarding the competition mentioned at the beginning, for which I voted positively.**

12 September 2020  
Veliko Tarnovo

Signature: .....  
(Prof. V. Kuteva – Tsvetkova, DSc)