

REVIEW

by professor Dora Levterova – Gadjalova, DSc

from the Plovdiv University “Paisii Hilendarski”

of the materials submitted for participation in the competition
for the academic position of "professor" at Sofia University "St. Kliment Ohridski”

in the field of higher education 1. Pedagogical sciences

professional field 1.2. Education

(Special education)

In the competition for "professor", announced in the State Gazette, issue 48 of May 26, 2020, The only candidate in the competition is Assoc. prof. Milen Zamfirov, DSc from Sofia University “St. Kliment Ohridski ”with 3 independent monographs; 13 articles and reports published in scientific journals, referenced and indexed in world-famous databases with scientific information, 4 of which in English. The overall scientific production of the candidate includes 10 monographs, three textbooks, 3 bibliographies of scientists, 111 articles in renowned journals, 106 papers presented at conferences without impact factor, 10 published abstracts of reports from conferences and scientific forums, 19 popular science articles , 12 multimedia products (CD/DVD/WEB).

In relation with the minimum requirements for holding the academic position of "professor", the following facts have been established for the candidate:

Group indicators A 50 points

Group indicators B 100 points

Group of indicators In 200 points

Group of indicators D 270 points

Group of indicators D 225 points

Indicator group E 410 points

It is evident that the scientific production of the candidate Assoc. prof. Milen Zamfirov significantly exceeds the minimum requirements for the academic position of "professor".

The candidate Assoc.prof. Milen Zamfirov has submitted a total of 15 scientific papers, of which 3 monographs and 13 articles and reports published in scientific journals, referenced and indexed in world-famous databases of scientific information. All of the submitted publications are accepted for review. The distribution of scientific papers by rubrics: language of publication and publication in the country and abroad is as follows, 6 of the articles are published in Bulgarian scientific journals and 4 in English-language scientific journals. The monographs and articles have the full text content and certified publication.

1. Brief biographical data of the candidate

The candidate has a Bachelor's degree in "special education " and "physics"; Master's degree in "special pedagogy" and "mathematics and informatics"; acquired qualifications in CISCO Certified Network Associate, "Teacher of Information Technology 5.-8. Class; „Teacher of informatics and information technologies; "Math Teacher"; first qualification degree, the educational and scientific degree "doctor" in the scientific specialty "methodology of teaching physics" and the scientific degree "doctor of sciences" in special education.

In his professional career he went through the positions of "resource teacher"; Executive Director of the Day Center information technology teacher; hospital teacher. Since 2009 he has been working at Sofia University "St. Kl. Ohridski" with career development as a senior assistant, chief assistant, and associate professor. Since 2013 he has been the Coordinator of the Doctoral School at the Faculty of Educational Sciences and the Arts and the EEA GRANTS Coordinator for the Faculty of Educational Sciences and the Arts. Kliment Ohridski”, since 2019 he has been the director of the Center for Support of Foreign Students of Bulgarian Origin at Sofia University’s. Kliment Ohridski”. In November 2019 he was elected Dean of the Faculty of Educational Sciences and the Arts at Sofia University "St. Kliment

Ohridski".

2. General characteristics of the candidate's activity

The academic employment of Assoc. Prof. Zamfirov in the last five years exceeds the required and varies for the individual academic years from 760 hours to 2555 hours. The taught disciplines present the academic awareness and the competence of the candidate to synergize knowledge from different scientific fields: Special pedagogy; ICT in learning and working in a digital environment; Methodology of teaching mathematics to students with SEN; CTM of education in natural sciences and ecology for students with SEN; TMO of computer modeling and IT training for students with SEN. For each of the academic disciplines, the candidate has developed author's curricula, and in addition a curriculum on "Formation of skills for project development" is presented.

The scientific and scientific-applied activity of the candidate could be specified in several main scientific spaces:

- Information and communication technologies in teaching and working in a digital environment for students with SEN, including educational digital games;
- Computer modeling for students with SEN;
- Psychometric tests and diagnostic tools for students with SEN and for students with talents;
- Application of classical approaches in Bulgarian inclusive education;
- Methods for non-formal learning in the context of comparative special pedagogy.

Assoc. Prof. Zamfirov has participated in two international projects related to the problems of sign language and robotics and ICT in SEN, and for both projects he was a national coordinator. He has also been a leader of 4 national projects and a trainer and expert in six national projects.

The facts speak eloquently about the high scientific authority of the candidate:

- participation in five scientific juries for the acquisition of ESD "Doctor" and in one jury for the academic position "Associate Professor";

- Executive Peer-Reviewer position in the Journal of Educational Technology & Society; International Journal of Education (IJE) and in the International Journal on Information Theory (IJIT).

- scientific guidance of 7 successfully defended doctoral students;

- cited publications in Web of Science Clarivate Analytics / 1997 - / - a total of 6 citations, 3 citations of 10 indexed documents h-index: 1; Scopus ELSEVIER / 1960 - / - a total of 6 citations of 8 indexed documents h-index: 2; EBSCO: Academic Search Complete - 1 citation; JSTOR - 1 citation; SpringerLink - 1 citation; Central and Eastern European Online Library / CEEOL / - 3 citations; Citations established by the author: in the traditional way - 62 citations and through Google Science - 12 citations with h-index: 2;

- indexed publications: EBSCO: Academic Search Complete - 2 publications; Central and Eastern European Online Library / CEEOL / - 12 publications; JSTOR - 1 publication; CiteSeerX - 4 publications; INION RAS - 6 publications; Russian Index of Scientific Citation eLIBRARY.ru / РИИЦ / - 7 publications;

- publications reflected in library catalogs: National Library "St. St. Cyril and Methodius "- 77 publications; University Library "St. Kliment Ohridski "- 48 publications; Karlsruher Virtueller Katalog / KVK - in British of Library / - 1 publication; WorldCat OCLC - 15 publications.

The organizational competence of Assoc. Prof. Zamfirov is highly valued and has given grounds for his inclusion in the composition of the Social and Public Commission of Sofia University "St. Kliment Ohridski ".

Assoc. Prof. Zamfirov is a winner of 6 awards of the Department of Information and Teacher Training at Sofia University "St. Kliment Ohridski "for educational software products for educational software for teaching mathematics to students with mental retardation, category“ Flash ”in mathematics for students with SEN;

The candidate has participated in working groups for the development of a status for the Doctoral School of the Faculty of Primary and Preschool Pedagogy; preparation for documentation for institutional accreditation of distance learning at Sofia University "St. Kl. Ohridski "; for preparation of a self-assessment report for opening a procedure for accreditation of doctoral programs for acquisition of ONS Doctor in professional field 1.2. Pedagogy; for preparation and realization of postdoctoral studies at Sofia University "St. Kliment Ohridski "; for preparation and conducting of a candidate-doctoral minimum; for elaboration of a concept for development and implementation of a educational center for animation; counseling and support for the children and students of the teachers and employees of Sofia University "St. Kl. Ohridski "in additional activities; for optimization of activities and processes in Sofia University "St. Kl. Ohrid "through a unified information system; for participation in a commission for candidate-student exams, for the financial condition and financial management of the Faculty of Preschool and Primary School Pedagogy at Sofia University "St. Kliment Ohridski" and others.

Participates in expert groups designated by the National Agency for Evaluation and Accreditation for program accreditation in the professional field 1.2. Pedagogy, field of higher education 1. Pedagogical sciences.

The candidate was the coordinator of the Doctoral School at FNPP at Sofia University "St. Kl. Ohridski" and head of the University Center "Academy for Children" at Sofia University "St. Kliment Ohridski ".

He works successfully and effectively with PhD students, as he has been the research supervisor of 7 successfully defended doctoral studies - PhD in English.

3. Scientific contributions

The main research interests and scientific achievements of Assoc. Prof. Zamfirov can be divided into several scientific spaces:

- A self-created, tested and implemented new approach in identifying students with special educational needs and talented students, as well as supporting the general education and SEN teacher in their work. The subject is developed in depth and is up

to date by offering a model that would assist the general education teacher in choosing effective approaches and methods of teaching in an inclusive classroom, which has both a student with SEN and a talented student. The methods described in the monograph "Applying the classical approach of Jean Piaget in Bulgarian inclusive education" are applicable to all focus groups of inclusive education. A model for determining the intellectual level of a student is presented, based on Piaget's phenomena, diagnostic tests for psycho-physical development and for examination of intellectual development. The issue is interpreted in the habilitation work "Applying the classical approach of Jean Piaget in Bulgarian inclusive education." The habilitation work brings out a new vision and proves in a new way significant new aspects of applied and scientific application of already existing scientific fields and diagnostic tools [1].

The application of Piaget's concepts in the process of inclusive education and application of computer modeling and ICT in the education of students with SEN are based in a number of articles by the candidate - articles [6], [12], [15]. The experimental research developed in the articles proves through Piaget's concepts and using items and phenomena in a correlated aspect of Piaget and Binet-Terman, opportunities for more effective development of individual programs, adequate to the progress of students with intellectual disabilities and for students with SEN from other groups.

An innovative trend is highlighted in the tendencies for the classification of mental retardation - article [8], and in addition to the analysis of historical movements in the development of the classification of mental retardation through a review of various revisions of the International Classification of Diseases, a comparison between different classifications of mental retardation. backwardness.

A promising model for the education of students with dyslexia is the reflected analysis of the use of concept maps in the learning process [10]. The candidate interprets the results of a research of respondents - teachers on the possibilities of applying concept maps in the process of teaching students with dyslexia in the exact

sciences by reviewing the four scoreboards with concept maps applicable in chemistry, biology and physics classes.

- *the conceptual aspects of the digital tools and technologies*, reflected in the monograph "Theory and methodology of teaching computer modeling and information technology to students with special educational needs". The monograph interprets the use of methods and tools for presentation, analysis, interpretation and transmission of data that fit into the educational process in mathematics. The development and implementation of innovative didactic concepts based on the use of technology is a key feature to improving the learning process in mathematics. The monograph discusses variants of computer modeling and some author's computer programs that would benefit students with learning disabilities in cultural and educational field Mathematics, Informatics and Information Technologies [2], [3].

- *information technologies for students with special educational needs* [4, 5, 11]. In this group of publications, various computer programs – some made by the candidate - are considered as a contribution to computer training in the initial course for students with special educational needs. With clear arguments, supported by factual data, it has been proven that education in this field is related to the formation of students' digital literacy by creating computer models of familiar objects, processes and phenomena and experimenting with them. The main emphasis is on programming languages, which are defined as visual, and they are basic for the next stage in the development of text programming languages - for example Microsoft Visual Studio, where editing graphic objects corresponds to the existing text of the program. Mastering visual programming competencies is also important for the development of mobile applications and the use of mobile sensor devices [5]. The visual programming environment makes it easy to write both web applications for different browsers and to create console applications for programming microcontrollers. The languages from the so-called block programming [11], which provide opportunities to master the first language when introducing students. Through data from statistical analysis of the results related to the implementation of author's software in a number of Bulgarian schools, it is proved that the application of new / author's / specialized software in the

subject of mathematics for 1st, 2nd, 3rd and 4th grade for students with special educational needs increases the understanding and assimilation of mathematics teaching material by students with SEN in the initial stage of the basic educational degree [5].

- *the application of non - formal methods in the education of children and adults with disabilities* [13],. In this group of publications, a model was created and implemented by the candidate for application of non-formal teaching methods among students aged 13 to 21 was presented in the Republic of Cyprus. The model is in three parts and has been implemented as a social service for five years - a service with three programs, which aims at successful career guidance and career development of young people and adults with disabilities with the assistance of a network of private sector organizations [13]. The main areas of non-formal learning used are described: theater, sports, music, art, environmental education and photography. An overview of the essence of some of the commonly used non-formal teaching methods in Cyprus is made, with a subsequent emphasis on the application of the iPad in the classroom.

The monographs are reviewed by habilitated lecturers who are recognized specialists in their fields, and the articles are in indexed and referenced Bulgarian and world publications.

4. Assessment of the personal contribution of the candidate

The personal contribution of Assoc. Prof. Milen Zamfirov for the development of the processes of inclusive education for students with special educational needs is indisputable. The formulated contributions and the obtained results are his personal merit.

5. Critical remarks and recommendations

In the publications of Assoc. Prof. Zamfirov there are clearly identified innovative aspects related to the application of the competence approach in the inclusive education of students with special educational needs, which can be developed continuously with successful scientific theoretical and practical applicability.

CONCLUSION

The documents and materials presented by Assoc. Prof. Milen Zamfirov meet all the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria.

The candidate in the competition has submitted a sufficient number of scientific papers published after the materials used in the defense of PhD and "Doctor of Science". In the candidates work there are original scientific and applied contributions, which have received international recognition, as well as a part of them had been published in journals and scientific journals published by international academic publishers. His theoretical developments have practical applicability, as some of them are directly oriented to the educational work. The scientific and teaching qualification of Assoc. Prof. Milen Zamfirov is undoubtful.

After getting acquainted with the materials and scientific papers presented in the competition, as well as analysing their significance and the contained in them scientific, scientific-applied and applied contributions, I find it reasonable to give my positive assessment and recommend to the Scientific Jury to prepare a report-proposal to the Faculty. Council of the Faculty of Educational Sciences and the Arts at Sofia University "St. Kliment Ohridski "for the election of Assoc. Prof. Milen Zamfirov, DSc at the academic position "Professor" at Sofia University "St. Kliment Ohridski "in professional field 1.2. Education (Special education).

11.09. 2020

Reviewer:

(prof. Dora Levterova – Gadjalova, DSc)