

REVIEW

**by Prof. Gabriela Nikolova Kirova, PhD,
at the Faculty of Education Sciences and Arts at the Sofia University “St. Kl. Ohridski”
on a competition for the academic position of Professor,
in the field of higher education 1. Pedagogical Sciences,
professional field 1.3. Pedagogy of Education in...(Methodology of Education in
Technology and Entrepreneurship in Primary Classes), announced by the Sofia
University “St. Kl. Ohridski” in State Gazette, issue 48/28.06.2022 for the needs
of the Primary School Pedagogy Department**

1. Compliance of the procedure and the submitted documentation with the applicable legislation

In Official Gazette No. 48 of June 28, 2022 a competition was announced for the election of a “professor” in Professional Field 1.3. Pedagogy of education in ... (Methodology of teaching in technology and entrepreneurship in primary classes) for the needs of the Faculty of Education Sciences and Arts (FESA) at the Sofia University “St. Kliment Ohridski” (SU). The only candidate in the competition is Associate Professor Dr. Nikolay Ivanov Tsanev. This review was prepared on the basis of Order No. ПД - 38-391/13.07.2022 of the Sofia University “St. Kliment Ohridski” Rector, Prof. Dr. Anastas Gerdzhikov, on the basis of the decision of the Commission for admission to the competition, appointed by the Order of the Rector of SU No. RD 38-362/08.07.2022. By the protocol of 30.08.2022, the Commission has unanimously established that all the necessary documents for participation in the competition according to Article 119, Paragraph 2 of the Regulations on the Conditions and Procedure for the Award of Scientific Degrees and Academic Positions at SU “St. Kliment Ohridski” are present, the applicant meets the eligibility conditions and the Commission admits him to the competition. On the basis of the Minutes of the first meeting of the Scientific Jury dated 02.09.2022, the candidate’s eligibility for evaluation in accordance with the minimum national requirements and the additional requirements of the SU pursuant to Article 119, Paragraph 3 of the Regulations on the Conditions and Procedure for the Award of Scientific Degrees and Academic Positions in the Sofia University. The Scientific Jury has verified the compliance of the transcript submitted by the candidate with the minimum national requirements and the additional requirements of the SU. The Scientific Jury unanimously decided that the candidate complies with the minimum national requirements under Article 25, Paragraph 2 and Paragraph 3 of the Academic Staff Development Act in the Republic of Bulgaria (ASDARB) on the basis of all the documents submitted by the candidate. There is no evidence of plagiarism in the scientific works.

As a member of the Scientific Jury, I have found no procedural violations. I have obtained access to the documents and materials of the only candidate in the competition, Assoc. Prof. Nikolay Ivanov Tsanev, in the manner prescribed by Art. 6, Para. 13 of the Regulations on the Conditions and Procedure for the Award of Scientific Degrees and Academic Positions within 3 days after the deadline for submission of the documents (August 30, 2022), which are accurately formatted and allow for an objective and complete assessment in accordance with

the requirements of the ASDARB and the Regulations for its implementation, as well as the Regulations of the SU and the Faculty of Education Sciences and Arts.

Pursuant to Article 6, Paragraph 8 of the above Regulations, I have signed a Declaration under Article 4, Para 6 of the ASDARB (within 3 days of the submission of the applicant's documents).

2. General presentation of the applicant

I have known my colleague Assoc. Prof. Dr. Nikolay Tsanev since the beginning of his academic career at the Faculty of Primary and Preschool Pedagogy. For almost 35 years we have been working in the same department – Primary School Pedagogy. This fact allows me to claim that I have a broad view of his biography in at least three directions – as a teacher, as a researcher and as an organizer of the learning process.

Assoc. Prof. Tsanev completed his secondary education in 1978 at 31st Secondary School with (study of) foreign languages and management in the city of Sofia. He received his higher education (master's degree) at the Higher Pedagogical Institute in Blagoevgrad, Faculty of Education, specialty of Pre-school Pedagogy with the qualification “teacher” in 1984. In the period 1985 – 1987 Assoc. Prof. Nikolay Tsanev worked as a teacher of children in a preparatory group in the National Educational Complex of Culture in Sofia. In 1987 he started to work at the Sofia University “St. Kliment Ohridski” at the Faculty of Primary and Preschool Pedagogy (now the Faculty of Education Sciences and Arts), successively holding the academic positions of Assistant Professor (1987-1991), Senior Assistant Professor (1991-1994), Senior Assistant Professor (1994-2005) and Associate Professor (2005-present).

Assoc. Prof. Tsanev holds a PhD degree in Didactics of Engineering and Technology from January 4, 1999.

The candidate in the current competition has held responsible administrative positions at the Faculty for many years, where he worked: administrator of the e-learning system of the Faculty of Education (2009 – present), head of the Department of Primary School Pedagogy (2009 – 2015), deputy dean for the Bachelor educational qualification degree and e-learning (2011 – 2019), technical assistant to the dean for e-learning and distance education and business activities (2019 – present). Assoc. Prof. Nikolay Tsanev is highly valued and respected among the academic staff of our faculty and university, which is evident from his regular election and re-election as a member of the General Assembly of the University and the Faculty Council of the Faculty of Education Sciences and Arts.

He holds several significant qualifications and specializations: a foreign language specialization in English from the New Bulgarian University (2004-2005), a postgraduate qualification from the Liverpool Hope University, UK (2005-2006), from where he obtained an European Certificate in Management of Children's Educational Institutions, a postgraduate qualification at the Sofia University “St. Kl. Ohridski”, Faculty of Pedagogy, from which he holds an Additional Professional Qualification “Specialist in Design and Delivery of Online Learning”. The expert activity of Assoc. Prof. Dr. Nikolay Tsanev is also manifested in his participation as a consultant in the Commission for the drafting of the State Educational Requirements (SER)

and curricula in information technology for I – IV grade (2006) and in the Commission for SER and curricula in technology and entrepreneurship for I – IV grade (2015).

He has supervised three PhD students, one who has already successfully defended and two whom he is currently supervising. The successfully defended PhD student of Associate Professor Tsanev is a PhD student named Iliyana Ivanova Simeonova, Faculty of Education Sciences and Arts, Sofia University “St. Kl. Ohridski”, thesis “Pedagogical design of e-learning in foreign language for student in pedagogic”.

3. Teaching activities

During his long teaching career at the Sofia University “St. Kl. Ohridski”, Primary School Pedagogy Department, Assoc. Prof. Nikolay Tsanev has had a full academic classroom and extracurricular employment, having taught the following scientific disciplines, fully corresponding to the profile of this competition:

Didactics of Technique and Technology, full-time study, 3rd year, Pre-school and Primary School Pedagogy (PPSP) – Bachelors

Construction and applied activities, full-time study, 3rd year, PPSP – Bachelors

Didactics of Engineering and Technology, full-time study, 4th year, Primary School Pedagogy and Foreign Language (PSPFL) – Bachelors

Construction and applied activities, full-time study, 4th year, PSPFL – Bachelors

Didactics of engineering and technology, part-time studies, 3rd year, PSPFL – Bachelors

Construction and applied activities, part-time studies, 3rd year, PPSP – Bachelors.

Compulsory elective course (CEC) – Origami, full-time study, 3rd year, PPSP - Bachelors

CEC – Origami, full-time study, 1st year, PSPFL – Bachelors

CEC – Origami, part-time studies, 4th year, PPSP – Bachelors

Methodology of Information Technology Education, full-time study, 3rd year, B PPSP – Bachelors

Methodology of Information Technology Education, full-time study, 4th year, PSPFL – Bachelors

Methodology of Information Technology Education, part-time studies, 4th year, PPSP – Bachelors

Methodology of teaching in engineering and technology – Special Pedagogy, 3rd year, full-time study

Methods of teaching in engineering and technology – Special Pedagogy, 4th year, part-time studies.

Didactics of technique and technology, part-time studies, 2nd year, Primary School Pedagogy (PSP) (graduates of other majors) – Masters

Didactics of technique and technology, part-time studies, 1st year SPS (graduates in pedagogical studies) – Masters

Constructive-technical and applied activities in occupational therapy, part-time studies, 2nd year, Medical rehabilitation and occupational therapy – Masters

Teaching Methodology of Information and Communication Technologies in Early Language Learning, part-time studies, 2nd year – Masters (ELL)

Elective course (EC) – Origami for teaching purposes, part-time studies, 2nd year, PSP (graduates of other majors) – Masters

EC – Origami for teaching purposes, part-time studies, 1st year, PSP (graduates of other majors) – Masters

EC – Educational software for children, part-time studies, 2nd year, PSP (graduates of other majors) – Masters

EC – Educational Software for Children, part-time studies, 1st year, PSP (graduates of other majors) – Masters

EC – Digital competence and digital creativity, part-time studies, 1st year, Special Pedagogy

Optional course (OC) – Design and modelling, part-time studies, 2nd year, PSP (graduates of other majors) – Masters

OC – Construction and Modelling, part-time studies, 1st year, PSP (graduates of other majors) – Masters

4. Research activities

An important professional characteristic of the candidate in this competition is his active participation and highly successful leadership of research projects. He is the leader of the following 6 (six) research projects:

- Creation of a variant model for the introduction of distance learning in the Master's degree programme, **leader**, 2006.
- “Increasing the quality of education of students of pedagogical specialties through active use of electronic (web-based) learning in distance form”, **leader**, contract No. 12/2008.

- Study of the possibilities of e-learning (blended form) for optimizing the education in the Bachelor's degree programme, **leader**, contract No. 91/2009.
- Establishment of a research and training centre for e-learning, **leader**, Contract No. 79/2010.
- Research and presentation of good practices in the integration of information and communication technologies in education, **leader**, contract No. 64/18.04.2013.
- Development of multimedia educational resources for electronic forms of distance learning, **leader**, contract No. 54/2015.

Assoc. Prof. Nikolay Tsanev, PhD, participates in 10 other research projects – international, national and university projects:

- European Enhancement of Early Years Management Skills – EEEYMS, Contract number: UK/03/B/F/PP-162_039, 2005.
- Strengthening and Sustainable Development of the Research Potential of Sofia University in the Field of E-Learning, Grant Scheme “Support for the Development of Doctoral Students, Postdoctoral Fellows, Graduate Students and Young Scientists”, Contract Number: BG051PO001-3.3.04/52, 2007.
- Development and improvement of inter-faculty doctoral programme in the field of pedagogical research and e-learning at the Sofia University, Operational Programme “Human Resources Development”, Contract Number: BG051PO001-3.3.06/0026, 2007.
- Integrated University Centre for Research, Creation and Quality Assurance of e-Learning in Diverse Educational Contexts (IUCRCQA), Research Fund, Contract Number: INZ01/0111, 2009.
- Student Practices, Mentor, Contract Number: BG051PO001-3.3.07-0002-C0001, 2013.
- Qualification of pedagogical specialists, Member of the Project Management Board, Human Resources Development Operational Programme, Contract Number: BG051PO001-3.1.03-0001, 2013.
- Student Practice-Phase 1, Mentor, Contract Number: BG05M2OP001-2.002-0001, 2016.
- Resourcing of e-courses for distance learning, contract No. 46/12.04.2016.
- Applied aspects of preparing student-educators to work with electronic resources, contract No. 80-10-170/16.04.2019.
- MODERN-A: “Modernization in Partnership through Digitalization of the Academic Ecosystem”, BG05M2OP001-2.005-0001, 2019-2023 contract:80-10-209/28.04.2020 Creating a Positive Learning Environment for Teacher Education Students in Inclusive Education, Research Fund, contract number 80-10-209/28.04.2020.

5. Scientific production

5.1. Compliance with the science metrics for the academic position

The evidence presented by the candidate for participation in the competition for scientific production, participation in scientific research projects, citations, supervision of doctoral

students fully meet and significantly exceed the minimum national requirements of the Academic Staff Development Act in the Republic of Bulgaria and the Regulations on the Conditions and Procedure for Acquisition of Scientific Degrees and Occupation of Academic Positions at the Sofia University “St. Kl. Ohridski”. Thus, with a required total of at least 550 points in all indicators, he provides evidence of more than 1,000 points (1,303.29).

Group A, indicator 1 – the candidate scores 50 points (with a minimum of 50).

Group B, indicator 3 – applicant scores 100 (minimum 100).

Group D, Indicators 4-10 – candidate scores 333.33 (minimum 200).

Group E, Indicators 11-13 – candidate scores 215 (minimum 100).

Group F, Indicators 15-21 – candidate scores 604.96 (minimum 100).

5.2. Content analysis of the scientific papers submitted to the competition

For participation in the competition for professor Assoc. Prof. Nikolay Tsanev, PhD, has submitted an extensive list of scientific works, including: one habilitation work – monograph, two monographs, which are not presented as main habilitation works, one published book based on a defended dissertation for the award of PhD, seven (7) articles and reports, published in non-refereed peer-reviewed journals or published in edited collective volumes, two of which are co-authored, nine (9) published university textbooks and textbooks used in the school network, seven (7) teaching aids used in the school network.

With their thematic focus and contributory nature, the publications of Assoc. Prof. Dr. Nikolay Tsanev enrich the theory and practice in the field of technology and entrepreneurship methodology and information technology methodology in primary school.

The contributions of the author’s publications proposed for the academic position of professor competition can be summarized as follows:

- The methodological foundations of technological education in the field of constructivism are presented. Assoc. Prof. Tsanev has a long-standing interest in the topic of constructivist theory, and in his monograph he has thoroughly and comprehensively traced a number of aspects of constructivism from its origins, through its development, its reflection in the learning process, the principles of learning in the application of the constructivist approach, and so on. The most prominent names who have contributed to the development of constructivist methodology are excellently presented in the monograph “Technological Learning in the Field of Constructivism”. The question of the advantages of constructivist approaches over so-called traditional learning is clarified. The constructivist classroom and corresponding learning strategies are introduced by outlining the four main strands of contemporary constructivism. The second important focus of the monograph is the elaboration in detail of the topic of technology (from antiquity to the present) and technological learning, specifically highlighting the different didactic technological systems. The curricular content is very competently presented and the current curricula for the subject of technology and entrepreneurship in grades I - IV are analysed. Of particular value to me is the author’s presentation of a constructivist methodological approach to the study of technology while presenting 22 constructivist methods and techniques in technology education in a theoretical-practical perspective. The competencies of Assoc. Prof. Tsanev in the field of information and

communication technologies are well known in academic circles and they are manifested in his monographic work, where the use and application of ICT in the constructivist classroom is presented. The author of the monograph does not remain in the field of purely theoretical developments, as he also pays attention to the topic of constructivist lesson design in technology education. In this sense, the analysed scientific work has also a serious applied aspect.

- A comprehensive elaboration of the problems of origami art and its application is made by Assoc. Prof. Dr. Nikolay Tsanev in the monograph “The Art of Origami in Educational Environment”. Some good possibilities for the use of origami in Bulgarian schools are presented, highlighting the advantages of this type of art for the development of thinking, imagination and dexterity of young students, as well as its therapeutic possibilities.

- Specific methodological recommendations for the use of origami in children and primary school age are described.

- The author’s concept on the didactic foundations of technological education in primary school is developed. In a monograph with the same title, the candidate of the present competition develops the issues of methods and methodology of modern technological education, the content of technological education, the basic didactic principles, methods and strategies in this education. The topic of organizational forms of training is specially developed and lessons in technology and entrepreneurship with their specific features are classified. Attention is paid to the new emphasis – training in entrepreneurship.

- A study of the symbolic-analytical training implemented in a technological educational environment with the use of Lego Dacta learning sets in the conditions of classroom and out-of-class work with primary school students is presented. The book “Didactic functions of models and modelling in technological education” focuses on the practical implementation of this idea – the operationalization of the modelling method in the implementation of the basic didactic functions, the specific results of the author’s theoretical and empirical research, substantiated in the form of methodological guidelines, didactic materials, training programs, etc.

- The issue of teachers’ digital competence is clarified by presenting contemporary perspectives. A typology of teachers’ preparation and related opportunities for the application of modern technologies in the teaching process is made.

- The most important aspects of connectivism as a new theory of learning are elaborated by outlining its advantages and disadvantages.

- Some aspects of STEM education such as its impact on the rouse of interest in science and technology and the possibilities of its implementation in Bulgarian schools are specifically developed.

- A study of the possibilities of applying e-learning courses for distance education (blended type) with master students of pedagogical specialties is presented. The topic is thoroughly investigated in theoretical terms, a comparative study of the application of e-courses in university education in Bulgaria is made, author’s e-courses in compulsory and elective subjects are developed and experimentally tested.

Assoc. Prof. Nikolay Tsanev in his scientific works deals with issues in the field of modern pedagogical theories and practices, methods and methodology of technological training, the

application of information and communication technologies in education, e-learning and distance learning, the training and qualification of primary teachers, etc. The scientific interests and publications of the candidate fully meet the profile of the competition.

In the competition documents, Assoc. Prof. Dr. Nikolay Tsanev presents a reference of the following citations: in scientific publications, refereed and indexed in world-known databases with scientific information or in monographs and collective volumes – 3 pieces, citations in monographs and collective volumes with scientific peer review – 12 pieces, citations in non-refereed publications with scientific peer review – 10 pieces.

6. Scientific-theoretical, practical-applied and other contributions

- An in-depth, systematic, and comprehensive treatment of the problems of technology education at the elementary school age is made.
- The problems of constructivism in technological learning are developed in a broad theoretical, methodological and practical-applied plan.
- A number of pedagogical and practical issues related to the history, dissemination and application in the learning environment of the art of origami are studied and systematized.
- The theory of models and the practice of modelling are multifacetedly explored, presented and enriched in the light of their application in technology education.
- A didactic technology for teaching in technology and entrepreneurship in grades I - IV based on constructivist theory is created.
- Classification of types of teachers' preparation for work with digital technologies is made.
- Modern electronic-based distance education is studied in theoretical-practical terms.
- A model for the construction of technological training based on an author's concept applicable to technological training in the conditions of the Bulgarian educational system is presented.
- Numerous textbooks and teaching aids for primary school based on a modern methodological approach to the study of technology and entrepreneurship have been created and implemented in teaching practice.
- Models of work with the use of origami in technology education classes have been developed and implemented.

7. Personal impressions

I have known Assoc. Prof. Nikolay Tsanev, the candidate for the present competition for Professor, since 1987. During this long period I have always admired his professionalism and organizational skills. His teaching work with undergraduate, graduate and postgraduate students is distinguished by a high academic level. At the same time, he is well liked by his students. As head of the Primary School Pedagogy Department and as a long-standing deputy dean Assoc. Prof. Tsanev has impressed me with his strategic thinking, ability for excellent communication with all colleagues and clear vision for the development of the department and the faculty. His scientific interests are lasting and profound, which is evident in the monographs, textbooks and scientific articles submitted to the competition. In my work as head of the Primary School Pedagogy Department at present, I always rely on the advice of my colleague Tsanev. Another important characteristic is his willingness to selflessly undertake service

commitments that he brings to a successful conclusion. I very much appreciate the professionalism with which he leads his teams when working on research projects.

Assoc. Prof. Tsanev is also dedicated to his family.

8. Comments, recommendations and questions

I have no remarks to the scientific-applied and teaching activities of Assoc. Prof. Dr. Nikolay Tsanev. I recommend him to continue to tirelessly pass on his knowledge, skills and competences in the field of methodology of teaching in technology and entrepreneurship to teachers and students-future teachers in primary grades.

9. Final evaluation

From the foregoing it can be seen that Associate Professor Dr. Nikolay Ivanov Tsanev, PhD, is a proven specialist in the methodology of teaching in technology and entrepreneurship in the primary grades with very extensive research and teaching experience in this field. His scientific production fulfils the minimum national requirements under Article 25, Paragraphs 2 and 3 of the Academic Staff Development Act in the Republic of Bulgaria 1. Pedagogical sciences, professional field 1.3. Pedagogy of education in ... (Methodology of teaching in technology and entrepreneurship in primary grades). With 550 points required, he presents evidence for a respectable 1,000+ points (1,303). His work has been cited numerous times. There is no reason to believe that they are not his personal work, which rules out plagiarism. This gives me grounds to conclude that his scientific, scientific-applied, teaching activity and qualities satisfy the requirements of the Academic Staff Development Act in the Republic of Bulgaria, The ruled foe its implementation and the Regulations on the Conditions and Procedure for Acquisition of Scientific Degrees and Occupation of Academic Positions at the Sofia University “St. Kl. Ohridski”, required of candidates for the academic position of Professor. Therefore, in conclusion, **I give a positive assessment of the selection as “Professor”** and I take the liberty to propose to the Honourable Members of the Scientific Jury to support this candidature and to make a proposal to the Faculty Council of the Faculty of Education and Arts at the Sofia University “St. Kliment Ohridski” to elect Associate Professor Dr. Nikolay Ivanov Tsanev as **“Professor” of the Methodology of Teaching in Technology and Entrepreneurship in the Primary Grades**, believing that he deserves it.

Sofia, September 2022

Reviewer:

(Prof. Gabriela Kirova, PhD)