REVIEW

on the competition for the academic position "professor" in the field of higher education 1. Pedagogical sciences, Professional direction 1.3. Pedagogy of education in... (Technology and entrepreneurship education in primary grades and Methodology of work in class time in primary grades)

by Prof. PhD. Sashko Krastev Plachkov, Department of "Technological Education", Technical Faculty, South-West "University Neofit Rilski"

The assignment of the review is based on the decision of the scientific jury, determined by Order No. RD -38-390/13.07. 2022 of the Rector of SU "St. Kliment Ohridski".

1. Compliance of the procedure and the submitted documentation with the current regulations

Associate Professor DSc Lyuben Vladimirov Vitanov is the only candidate in the announced competition for the academic position "Professor". The competition has been announced in accordance with the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations on the Terms and Procedures for Acquiring Scientific Degrees and Holding Academic Positions at SU "St. Kliment Ohridski".

In the scientific jury, the candidate has presented documentation corresponding to the regulatory requirements, and the review shows that no violations of the procedure have been committed.

2. General biographical presentation of the candidate

2.1. *Recognizability* - Associate Professor Lyuben Vitanov was born on 22.02. 1960 in the city of Sofia. He completed his higher education with a master's degree in the specialty "Elementary School Pedagogy" in 1984, at the then Higher Pedagogical Institute - Blagoevgrad, now Neofit Rilski University of Applied Sciences.

His academic career at SU "St. Kliment Ohridski" began in 1991, successively holding the positions of assistant, senior assistant and chief assistant. In 1995, he successfully defended his dissertation and obtained the educational and scientific degree "Doctor". In 2001, after winning a competition, he held the academic position of "Associate Professor" in "Didactics of technique and technology".

An indisputable achievement in his scientific career is the dissertation work defended in 2021 for obtaining the scientific degree "Doctor of Sciences" in the Professional field of "Pedagogy". He is registered in the NACID Register for habilitated persons with scientometric indicators.

2. 2. *Qualifications* – for the time of building his academic career from 1991 until now, Associate Professor DSc Lyuben Vitanov has participated in trainings, schools and teaching exchanges, in order to increase his qualifications.

In a thematic plan, these specializations refer to interactive learning methods, elearning, education in entrepreneurship and digital education.

2.3. *Language competence*. Associate Professor DSc Lyuben Vitanov declares proficiency in English, varying degrees, according to the European Language Reference Framework.

2.4. *Consulting and expert activity*. Member of the editorial boards of: "Elementary Education" magazine and "Electronic Magazine for Science, Culture and Education" of the Faculty of Educational Sciences and Arts of SU "St. Kliment Ohridski",

Participation in scientific juries for procedures under ZRASRB.

2.6. *Digital competence* – skills and competences to work with:

Microsoft Office, Emails Internet, Windows, Social networks (Facebook, LinkedIn, Twitter, Instagram, Youtube etc.), Microsoft Excel worksheet, Microsoft Word Document, PowerPoint Presentation, Google sheets, Microsoft Office (Word Excel, PowerPoint Access), Internet Office 365, Social Media.

3. Teaching activity

As a habilitated person, Associate Professor DsC. Lyuben Vitanov teaches courses according to the competition profile at the bachelor's College of Education and at the Master's College of Education, full-time and part-time form of education:

- Didactics of technique and technology;
- Methodology of the pedagogical work in class time;
- Methods and techniques for active learning;
- Road traffic safety education;
- Education and play;
- Inclusive education.

It is clear from the overview that Associate Professor DSc Lyuben Vitanov has a clear academic profile, which also determines the contours of his research activity.

In addition to academic experience, the candidate for "Professor" is also popular for his leading positions for the introduction, in Bulgarian conditions, of productive methods in the field of technology and entrepreneurship education and for working in class.

This definitely makes it recognizable in the educational and scientific space.

4. Scientific production

The scientific interests of Associate Professor DSc Lyuben Vitanov are oriented in three areas:

Methodology of technology and entrepreneurship education, digitization of the education of student-teachers. The problematic segments in them clearly highlight the dynamics and direction of his scientific achievements: methods and techniques for active learning; information and communication technologies in education; positive pedagogical strategy in class time; STEM education in technology and entrepreneurship; innovative teaching methods in the initial stage, qualification of pedagogical specialists; education in initiative and entrepreneurship in class time.

Among the scientific community, Assoc Prof. DSc Lyuben Vitanov is known as an active researcher and scientist in favor of the introduction of "Technology and Entrepreneurship" into the education at the primary and junior high school stages, as well as when working in the Class Hour, the so-called "New methods", in which the person-oriented approach is strongly advocated and the student is at the center of the pedagogical interaction. To a large extent, this orientation of his, has been transmitted to both the problems and the research of the doctoral students supervised by him (successfully defended 4 dissertations).

5. Scientific production

5.1. Compliance with scientometric indicators of occupancy of the academic position

5.1.1. *Fulfillment of the Minimum National Requirements* – from the submitted report it is clear that the candidate has 1048 points out of 550 points required for the academic position "Professor".

5.1.2. Implementation of other quantitative indicators – articles and reports published in refereed and indexed in world-famous databases with scientific information – 1 pc. (2022); articles and reports published in non-refereed peer-reviewed journals or published in edited collective volumes - 11 nos. (2005 – 2022) in Bulgarian; published monographic work, textbooks and teaching aids for university and school environments (1 monograph - habilitation thesis - 2022; 1 monograph - 2022, 1 chapter of a collective monograph - 2015; 5 textbooks - 2005 - 2019 and 8 study aids - 2016 - 2019); noticed citations abroad and in our country -24 nos.; participation in projects (participated in 5 national projects (2013 - 2018); manager of 2 projects and member of 2 projects at the "Scientific Research" fund at SU "St. Kl. Ohridski" (2014 - 2020); scientific supervision of doctoral students (4 successfully defended), scientific, author and co-author of curricula (for 4 disciplines in bachelor's, in master's programs and programs for improving the qualifications of teachers).

5.2. Content analysis of the presented scientific works — for participation in the competition for "professor", associate professor Lyuben Vitanov participated with 29 nos. publications. Of them, 12 pcs. are textbooks and study aids for elementary grades that I accept for reference only.

Upon examination, I find that the mentioned publications are clearly distinguished from the publications for the acquisition of the ONS "Doctor" (1995) and those from the competition for the academic position "Associate Professor" (2001). I categorically emphasize once again that the publications presented by Associate Professor Lyuben Vitanov are in full compliance with the profile of the competition for the academic position of "Professor".

The review shows one more thing, that Prof. Vitanov has clearly expressed consistency, continuity and productivity in his publication activity, as, in addition to theoretical summaries, he offers the scientific community and the educational practice a number of pragmatic solutions regarding: innovative teaching methods, the STEM approach in technology and entrepreneurship education, software solutions for student preparation, methods and techniques for positive education and active learning, initiative and entrepreneurship education, etc.

These positives undoubtedly reflect both the quality of the scientific production of the candidate for "Professor" and his overall scientific and research potential. Here I should note his aspiration to publish in refereed editions indexed by international databases such as Scopus and Web of Science, as well as his orientation towards up-todate monographic works.

The report on citations presented by Prof. Vitanov shows a high interest from the scientific community, but this would have other dimensions if efforts were made to publish in English. In the published publications, Associate Professor Vitanov also participated in a team - 2005, 2007 and 2021, in two of the publications he was in first place, and in one of the publications he was in second place.

However, separation protocols between the authors are not presented, which makes it difficult to determine his contribution moments in them. His independent publications are 14 nos. As an indisputable achievement, the monograph of Associate Professor Lyuben Vitanov "Technology and Entrepreneurship Education" (2022) should be defined.

This statement of mine is based on the fact that this work is not another methodology that we are used to seeing, but is a deep research work with analyses, justifications and summaries concerning the education of technology and entrepreneurship in a systemic-structural, historical, didactic and engineering – technical plan. In this capacity, this monograph is successfully presented as a habilitation thesis. New knowledge is available that benefits both researchers of the subject and students and teachers of technology and entrepreneurship.

A special place is devoted to issues related to the integration of entrepreneurship education, and the analysis and search for relationships with the STEM approach in the context of the "Science and Technology in Society" movements, in particular STS, STSE and SSI concepts of technology and entrepreneurship education, give special value to work.

On this positive plane, the second monograph of Associate Professor Lyuben Vitanov – "STEM education in technology and entrepreneurship" (2022) should also be given a high rating. Here, the author convincingly reveals his ability to adapt to new educational modernity's, offering a systematization of the main problems of procedural STEM orientation, STEM competencies, STEM social and personal aspects, important potential problems of STEM education are analyzed.

A special place is given to the STEM facilitator role of the technology and entrepreneurship teacher. Particularly useful in the work are the sixth and seventh chapters, which contain examples of STEM visual learning in technology and entrepreneurship and examples of learning through STEM projects in technology and entrepreneurship. In summary, the scientific growth of Associate Professor Lyuben Vitanov can be seen in his other works, which undoubtedly catalyzed his monographic appearances.

The important thing here is that there is no repetition of the problem, but starting positions and upgrading. For example, this is clearly seen in the article "Technology and entrepreneurship education in the school education system" (2021), where the starting point is the analyzes and summaries in the context of the key competences - "technological" and "initiative and entrepreneurship". A systematization of the main regulatory requirements for the content and organization of education was carried out in the direction of the categories "teaching" and "learning".

In the article "Pedagogical priorities in technology and entrepreneurship education" (2022), the author aims to justify approaches that give a pragmatic focus to the education of "Technology and entrepreneurship" on the one hand, and on the other hand lead to a humanization of education in the context of the constructivist approach. In that sense, it should.

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

The quantitative and qualitative review of the scientific output of Associate Professor Lyuben Vitanov gives reason to indicate the following theoretical and practical contributions:

Critical analysis and justification of the place of the STEM approach and entrepreneurship in the teaching of "Technology and entrepreneurship" in primary schools; theoretical analysis and systematization of interactive methods and techniques for the formation of technological and entrepreneurial competence in elementary grades; development, adaptation and implementation of strategies, methods and techniques for active learning in "Technology and entrepreneurship"; development and testing of a methodology for interactive education of student-teacher in "Technology and Entrepreneurship"; analyzing and justifying methods and techniques for interactive learning in the classroom.

7. Personal impressions

I know Associate Professor Lyuben Vitanov as a teacher, author and researcher with his own style. Extremely active and productive, and the scientific and applied issues are of such characteristics and usefulness that make it popular both in scientific circles and among pedagogical colleges in all regions of the country.

His participation in scientific juries under the ZRASRB is distinguished by high expertise, responsibility and objectivity in specific judgments.

8. Notes, recommendations and questions

Some notes have already been made in the course of the quantitative and qualitative assessments of the scientific production of Assoc. Prof. DSc Lyuben Vitanov.

I recommend focusing efforts on more publications in Scopus and Web of Science indexed journals. Efforts need to be directed towards more joint publications with PhD students.

9. Final assessment

According to the representativeness of the scientific works and their compliance with the direction and profile of the announced competition, the related scientific contributions and personal positive impressions, give me the reason to announce my decision for a positive evaluation.

Given the personal qualities, indisputable academic authority and proven scientific growth of Associate Professor Lyuben Vladimirov Vitanov, I confidently propose to the honorable members of the Scientific Jury that he be elected to the academic position of "Professor" in Professional Direction 1.3. Pedagogy of education in... (Technology and entrepreneurship education in primary grades and Methodology of work in class time in primary grades), for the needs of the "Primary School Education" department at the Faculty of Educational Sciences and Arts of SU "St. Kliment Ohridski".

Mump.

Date: 27.09. 2022 Blagoevgrad Reviewer:

(Prof. PhD. Sashko Plachkov)