

Statement

by

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Concerning:

Defense of PhD Thesis and applying for Educational and Scientific Degree "Doctor"

1. Field of higher education 1. Pedagogical sciences
2. Professional direction 1.3. Pedagogics of training in ...,
3. Doctoral program "Teaching Methodology in Biology"

Author: Biser Sashkov Stanislavov

Topic: Web-based learning for a healthy lifestyle in Biology and Health Education in the 8th grade.

Scientific supervisors:

Assoc. Prof. Margarita Yordanova Panayotova, DB; Department of Botany and biological education, Faculty of Biology, University of Plovdiv "Paisii Hilendarski"

Chief Assist. Zlatka Petkova Vakleva, DB; Department of Botany and biological education, Faculty of Biology, University of Plovdiv "Paisii Hilendarski"

1. General presentation of the procedure and a brief biography of the PhD student

I have been appointed by order No. PD-21-1038 on 09.06.2022. of the Rector of Plovdiv University "Paisii Hilendarski" as a member of the scientific jury to ensure a procedure for the defense of a PhD thesis on the topic "Web-based training for a healthy lifestyle in Biology and health education in the 8th grade" for acquiring the educational and scientific degree "doctor" in the field of higher education 1. Pedagogical sciences, professional direction 1.3. Pedagogics of teaching in ..., doctoral program "Methodology of teaching in biology". The author of the PhD Thesis is Biser Sashkov Stanislavov – PhD student in (regular form of education) at the Department of "Botany and Biological Education", Faculty of Biology, PU "Paisii Hilendarski". The scientific supervisors have been: Assoc. Prof. Margarita Yordanova Panayotova, DB and Chief Assist. Zlatka Petkova Vakleva, from the Department of "Botany and Biological Education", Faculty of Biology, University of Plovdiv "Paisii Hilendarski".

Biser Sashkov Stanislavov submitted a set of documents in accordance with Article 36 (1) of the Rules for the Development of the Academic Staff of the PU:

- Application to the Rector of PU to disclose the procedure for the defense of a PhD Thesis;
- CV in European format;
- A protocol from the council of the Department of Botany and biological education with an approval of starting of Defense proceeding.
- PhD thesis
- Abstract
- List of scientific publications related to the topic of dissertation
- Copies of scientific publications
- Declaration of originality of the submitted documents

Biser Stanislavov graduated from the University of St. Kl. Ohridski" with a master's degree and a biology teacher qualification in 1995. He has been working as a biology teacher in various schools in Sofia and Ruse for 27 years. He has worked as a biology teacher at "Baba Tonka" Secondary School – Ruse since 2016 by now. He has been enrolled as a full-time PhD student in the Department of "Botany and Biological Education" - PU "Paisii Hilendarski" since 2016. The applicant submitted documents for 19 postgraduate qualification courses in various fields. He declares participation in 9 educational projects. He speaks fluent English and Russian.

2. Scientific significance of the PhD Thesis

The Covid 19 pandemic has caused restrictions on contact between people around the world. The traditional way of teaching had to be replaced by distance learning in the conditions of isolation. WEB-based learning was poorly studied in Bulgaria. A significant WEB-database had not been created. It was not researched its impact on the students, knowledge acquisition using WEB-resources, the possibility of conducting on-line tests, etc. There was a lack of evaluation of the results of conducting WEB-based training and their comparison to those of traditional training methods. These considerations make the research on Web-based healthy lifestyle learning in Biology and Health Education in Grade 8(9) extremely relevant.

3. Research the topic of the survey

The first chapter "Theoretical study of the research problem" covers 58 pages. The development of Web-based learning since 1925 to the present day has been presented in details and the models of Web-based learning. The most popular modern online learning systems have been presented: Moodle, Google classroom and Microsoft 365 (Teams). The concepts of "Health" and "Healthy lifestyle", "Monitoring the healthy lifestyle of adolescent students in Bulgaria" have been examined in details of medical, legal and other aspects.

The references presented 133 sources (80 in Cyrillic and 53 in Latin). It covers recent publications on the topic of the dissertation in the last 20 years. Five textbooks on Biology and health education have been added to the list.

4. Subjects and Methods

The objects of the study were students from the secondary schools at the 8th and 9th grade. The number of studied students is sufficient for relevant statistical processing with reliable results. The subject of the study is the development and testing of a methodological model of Web-based training for the formation of competencies for a healthy lifestyle in the teaching process of Biology and Health Education at the 8th grade. It was defined a purpose, 7 tasks of the study and hypothesis. The research methodology includes: theoretical study, conceptual modeling, content analysis, study of WEB-based educational environments, pedagogical experiment, testing, expert analysis, survey and mathematical-statistical analysis. The studied students were correctly divided into three groups Bk (controls), B1 and B2. A parametric analysis of the data (Student's t-test) was carried out, and significant differences ($P < 0.05$) were reported analyzing the results of the three groups mentioned above. The PhD student proved the results and the advantages of using a combination of web-based resources (group B2) applying an objective statistical method.

5. Assessment of the PhD thesis and its contributions

The dissertation covers 202 pages, including 73 tables, 39 figures, 71 diagrams and 7 appendices. The work is properly structured. It contains the following chapters: Introduction, Theoretical study of the research problem, Methodology of pedagogical research, Results, Conclusion, Contributions, Publications on the topic, References and Appendices.

The topic research on which the dissertation is based refers to the most relevant and rapidly developing areas of modern pedagogy, the entry of electronic resources into education for all age categories. The study has a clearly defined aim and objectives. The set of experimental tasks was correctly formulated regarding the purpose of the dissertation, as the complex approach was chosen. Modern and relevant methods were selected in the chapter "Methodology", and a reliable analysis of the data from the pedagogical experiment was performed. The results were interpreted in depth and very professionally. It makes a very good impression that they are presented not only in traditional tables, but also in colorful graphs. They illustrate the advantage of applying a combination of web-based resources very well.

Five general conclusions were formulated based on the obtained results. The applicant formulated 2 contributions for the theoretical pedagogics and 7 practical contributions in the chapter "Contributions". It is very important that the concept, methodology and conclusions of the dissertation work have been proved in the practice with the web-sites "Learning" and "I know for 7".

6. Publications related to the PhD Thesis

The PhD student submitted 6 publications. Four of them have been published in the "Scientific Works of the Union of Scientists in Bulgaria" and 2 in other collections of reports. As a result of his publication activity, the PhD student meets the minimum national requirements for acquiring the Educational and Scientific Degree "Doctor" (32.5 points) in the field of "Pedagogical Sciences".

7. Abstract

The abstract presents clearly the main statements, results, conclusions and contributions of the dissertation work. The abstract has been translated into English.

8. Recommendations for the scientific development of the applicant in the future.

I recommend the PhD student to publish the results of the dissertation work in journals referenced by Web of Science and Scopus, including journals with Impact Factor.

9. Conclusion

The dissertation work contains scientific, scientific-applied and practical results, which represent an original contribution to the science. It meets all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for the Application of LDAS and the Regulations of PU "Paisii Hilendarski" .

The dissertation shows that the PhD student Biser Sashkov Stanislavov has got competent theoretical knowledge and professional skills in the scientific specialty "Methodology of teaching biology", demonstrating qualities and skills for independent conducting of scientific research.

In conclusion, I am assessing positively the conducted research, presented in the dissertation work, abstract, achieved results and contributions, and I am going to propose to the honorable scientific jury to award the educational and scientific degree "Doctor" to Biser Sashkov Stanislavov in the field of higher education: 1. Pedagogical sciences, professional direction 1.3. Pedagogics of teaching in ..., doctoral program "Methodology of teaching in biology".

05.07.2022

The statement has been written by **Assoc. Prof. Dr. Atanas Georgiev Baltadjiev, DM**

Signature
