

OPINION

by Assoc. Prof. Dr. Gencho Vassilev Valchev
Associate Professor at Thracian University – Stara Zagora
on the dissertation for the award of the educational and scientific degree "Doctor"
in: field of higher education 1. Pedagogical Sciences
professional field 1.2. Pedagogy
doctoral program Special Pedagogy

Author: Krasimira Stoilova Ivanova

Topic: Personalized learning – a predictor for the inclusion of students with special educational needs

Scientific supervisor: Prof. Dr. Zhana Atanasova Yankova, Plovdiv University "Paisiy Hilendarski"

1. General presentation of the procedure and the doctoral student

By order No. PD-22-890 of 27.04.2026 of the Rector of Plovdiv University "Paisii Hilendarski" I have been appointed as a member of the scientific jury for ensuring a procedure for the defense of a dissertation on the topic "Personalized learning - a predictor for the inclusion of students with special educational needs" for the acquisition of the educational and scientific degree "doctor" in the field of higher education 1. Pedagogical Sciences, professional field 1.2. Pedagogy, doctoral program Special Pedagogy.

The author of the dissertation is Krasimira Stoilova Ivanova, a doctoral student in full-time study at the Department of "Pedagogy and Educational Management" with scientific supervisor Prof. Dr. Zhana Atanasova Yankova from Plovdiv University "Paisii Hilendarski".

The set of materials presented by Krasimira Ivanova on electronic media is in accordance with Art. 36 (1) of the Regulations for the Development of the Academic Staff of the University of Plovdiv, includes a dissertation, an abstract, a CV, 5 scientific publications on the topic of the dissertation and the necessary administrative documents for the procedure.

The doctoral student Krasimira Ivanova is active and demonstrates an affinity for working with children with special educational needs. The career development and professional commitment of the doctoral student are evidence of the consistency and depth of her interests in the problems of children with special educational needs. The educational status, the perimeter of professional interests and professional realization of the doctoral student show scientific and professional ambitions and are markers for personal activity and sustainability of professional interests and, last but not least, scientific curiosity (in the good sense of the term).

2. Relevance of the topic

Providing optimal conditions for social and educational integration of children with special educational needs is fundamental not only for the children themselves, but also for the entire complex of professional and personal relationships in the field of supporting personal development. The diversity of the needs of children with special educational needs, determined by the specificity and volume of their personal resources, requires the complexity of approaches and coordination of strategies for inclusion and training of this group of children, not only as part of the educational system, but also as part of the resource of society in general. In this sense, the role of adapted and optimized educational resources and technologies for inclusion, as part of the special pedagogical toolkit of developing, adapting and integrating strategies, is significant. In this context, the present work is characterized by a marked relevance for modern science and pedagogical practice.

3. Knowledge of the problem

The structure and content of Chapter One and Chapter Two of the dissertation demonstrate good awareness and knowledge of the basic and current scientific issues in the two areas on which the research concept is built:

- 1) Characteristics of inclusive education as a comprehensive educational strategy and definition of inclusion through inclusive education for students with SEN, with an emphasis on the model of digital inclusive education;
- 2) Personalized learning as a concept and process (with an emphasis on personalized learning as a factor for the inclusion of children and students with SEN).

Good knowledge of the evolution of basic scientific statements to the current scientific vision in the study of personalized learning is associated with sufficient competencies in the field of inclusive education and in particular the inclusion and support of children and students with special educational needs.

The approach to selecting, systematizing and analyzing scientific information demonstrates knowledge of the specific issue, as well as developed skills in working with sources of scientific information.

4. Research methodology

The research design and research program are presented in the third chapter of the dissertation. The subject-object area of the study is correctly defined (section 3.1.1). The work has a clearly and precisely formulated goal. The goal is decomposed into 7 research tasks (in the abstract the numbering of the tasks is incorrect), which clearly outline the parameters of the study. The goals and objectives of the study are logically argued and fully correspond to the declared research hypotheses (null hypothesis

and 3 hypotheses). The hypotheses are correctly formulated and determine the emphases of the research program.

The research program is precisely developed and presented in detail. The time and content parameters of the research process are determined.

The methods of empirical research are correctly selected and directly correspond to the conceptual framework of the study. They include a survey with a developed author's survey and author's scale; a study using the diagnostic tool "mind maps" with the central concept of "personalized learning"; a training experiment using a mobile application with artificial intelligence.

The research toolkit is developed in accordance with the goal and objectives and does not raise doubts about correctness. It includes four main research tools:

First applied diagnostic tool (author's multidimensional survey, which aims to establish the reflection on personalized learning by practicing teachers and pedagogical specialists).

Second applied diagnostic tool ("mind map"). The mind map aims to establish the perception of personalized learning and is applied after the respondents have acquired knowledge about personalized learning.

Third applied tool of the empirical study (learning experiment with the DuoLingo mobile application as a smart digital technology, with students with SEN).

Fourth diagnostic tool (scale for evaluating the conducted learning experiment with an artificial intelligence application as a smart digital technology with students with SEN in a hybrid learning model).

The research tools are presented accurately, in detail and correctly and suggest opportunities for serious scientific analysis (as implemented in the fourth chapter).

For the purposes of primary data processing, statistical analysis and statistical inference, a wide range of statistical methods was used, implemented with three statistical packages (IBM SPSS 22, STATISTICA 13 and EXCEL 2016). The methods were used correctly and appropriately. The statistical methods are of high accuracy and allow for variable analysis of the data.

5. Characteristics and evaluation of the dissertation work and contributions

The presented dissertation work has a classic pyramidal structure: analytical review of information sources on the research issues (Chapters One and Two); research design - structure, parameters and content of the research program (Chapter Three); analysis of the research results (Chapter Four), conclusions, conclusion, list of literature used and appendices. The presented product also includes the contributions that the doctoral student has formulated. The volume is 281 pages (excluding contributions and appendices). The presentation includes 19 tables and 77 figures. 2 appendices (survey and rating scale) are presented to the main text. The list of sources used includes 263 literary sources and 44 normative documents.

The analysis of the results of the study is presented in the fourth part of the dissertation. The method of statistical analysis has been competently applied, which is a prerequisite for correct statistical conclusions. A quantitative and qualitative analysis of the results has been carried out. The differentiation of the emphasis areas of the analysis is in accordance with the goal and the hypotheses set. The interpretation of the data has been carried out competently, the generalizations and conclusions made are a serious basis for future work on the problem. I can note that the obtained data are not simply presented and described, but are interpreted and commented on in a quantitative and qualitative aspect, in accordance with the logic of the research program and the technological parameters and specificity of the toolkit. In the differentiated analysis of the data in the direction of the hypotheses, generalizations with theoretical and practical value have been drawn.

The doctoral student Krasimira Stoilova Ivanova has formulated 7 contributions to her dissertation. The contributions are of a complex nature and are differentiated into two subgroups: Contributions of a scientific theoretical nature (4 contributions) and Contributions of a scientific applied nature (3 contributions). I would like to note that when formulating the contributions to the dissertation, the doctoral student Krasimira Ivanova was objective and did not exaggerate her contributions.

6. Assessment of the publications and personal contribution of the doctoral student

5 publications on the topic of the dissertation have been presented. The content of the publications is in accordance with the problem areas covered in the work. According to this indicator, the regulatory requirements have been met.

7. Abstract

The abstract is in a format and with content that meet the requirements of the Law on the State Academic Research and Development of the Republic of Bulgaria and the relevant Regulations of the University of Sofia. Its content accurately reflects the presented dissertation.

8. Recommendations for future use of the dissertation contributions and results

My recommendation to the doctoral student is in the direction of future emphases in her research work: to develop comprehensive models for teaching and supporting students with special educational needs with various diagnoses in an electronic environment through information and communication technologies. I am sure that she has the intellectual and competence resources to do so.

CONCLUSION

The dissertation contains scientific, scientifically applied and applied results that represent an original contribution to science and meet all the requirements: of the Law on the Development of the Academic

Staff in the Republic of Bulgaria (ZRASRB), the Regulations for the Implementation of ZRASRB and the relevant Regulations of the PAISII HILENDARSKY PU.

The dissertation shows that the doctoral student Krasimira Ivanova possesses in-depth theoretical knowledge and professional skills in the scientific specialty "Special Pedagogy" by demonstrating qualities and skills for independent planning and conducting scientific research.

Conclusion: I confidently give my positive assessment of the conducted research. My assessment refers to the dissertation, abstract, achieved results and contributions. I propose to the esteemed scientific jury to award the educational and scientific degree of 'doctor' to Krasimira Stoilova Ivanova in the field of higher education: 1. Pedagogical Sciences, professional field 1.2. Pedagogy, doctoral program "Special Pedagogy"

12.06. 2026

Prepared the opinion:

Assoc. Prof. Dr. Gencho Valchev