

OPINION

by

Assoc. Prof. Ivan Vasilev Trichkov, PhD,
University of Plovdiv Paisii Hilendarski

of a dissertation for awarding the educational and scientific degree "doctor"

by: field of higher education 1. Pedagogical Sciences
professional direction 1.2. Pedagogy
doctoral program Special pedagogy

Author: Krasimira Stoilova Ivanova

Theme: PERSONALIZED LEARNING - A PREDICTOR FOR THE INCLUSION OF STUDENTS WITH SPECIAL EDUCATIONAL NEEDS

Scientific supervisor: Prof. Dr. Zhana Atanasova Yankova

1. General presentation of the procedure and the PhD student

By order № RD-22-890 dated 27.04.2026 of the Rector of Plovdiv University "Paisiy Hilendarski" (PU), I have been appointed as a member of the scientific jury to ensure a procedure for the defense of a dissertation on the topic: **PERSONALIZED LEARNING - A PREDICTOR FOR THE INCLUSION OF STUDENTS WITH SPECIAL EDUCATIONAL NEEDS** to acquire the educational and scientific degree "doctor" in the field of higher education 1. **Pedagogical Sciences**; professional direction **1.2. Pedagogy**, doctoral program **Special pedagogy**. Author of the dissertation is **Krasimira Stoilova Ivanova** - PhD student in full-time study at department "Pedagogy and educational management" at PU "Paisiy Hilendarski"; with scientific supervisor **Prof. Dr. Zhana Atanasova Yankova** from PU "Paisiy Hilendarski".

The set of paper materials presented by Krasimira Stoilova Ivanova is in accordance with Article 36 (1) of the Rules for the Development of the Academic Staff of the PU.

2. Relevance of the topic

Modern educational conditions place new demands on educators. An inclusive environment requires the implementation of approaches, strategies and forms of learning that allow the inclusion and equal participation of all students in the learning process. The research problem the doctoral student is working on is extremely relevant and significant for special education. Its significance is associated with the fact that the issues examined and developed in the dissertation are particularly important for both special pedagogy and inclusive education, because it concerns the scientific rethinking of personalized learning in the context of the inclusion of students with special educational needs with a focus on pedagogical practice and its implementation in educational institutions. In this context, it should be noted that personalized learning is not a new concept, but with the wide-

spread digitalization of education, it is gaining new dimensions of application to all children and students, and especially to children and students with special educational needs. This is precisely why it is of utmost importance to know the characteristic features, mechanisms and processes of its implementation in children and students with special educational needs. The presented dissertation contains a wide range of theoretical and empirical data and analyses, directly related to the outlined aspects of the researched issues.

3. Knowing the problem

The doctoral student knows the basic issues well and skillfully introduces interesting authorial interpretations with a scientific and applied focus. The theoretical statements on the research problem are presented comprehensively, multi-facetedly and in depth. The main constructs, the subject of the dissertation, have been competently researched. A valuable aspect is that, in addition to generalizations to scientific research in the spaces she explores, the doctoral student also contributes her own position and interpretations related to the researched issues.

4. Research methodology

The research methodologies chosen by the doctoral student allow for achieving the goal and obtaining adequate answers to the tasks set in the dissertation. The dissertation uses methods of theoretical analysis, empirical research methods, and statistical methods.

Methods of theoretical analysis include:

- research of sources from the scientific literature related to inclusive education and personalized learning as a factor for inclusive education of students with SEN;
- deriving an analysis of the theoretical framework for personalized learning as the inclusive education of students with SEN.

Empirical research methods include:

- surveying with a developed author's survey and author's scale, the content of which is formulated through the prism of the research questions posed;
- conducting a study using the diagnostic tool "mind maps" with the central concept of "personalized learning";
- educational experiment using a mobile application with artificial intelligence.

Statistical methods include:

- The processing of the empirical data was carried out with IBM SPSS 22, STATISTICA 13 and EXCEL 2016, based on which a qualitative analysis of the research results was carried out.

5. Characterization and evaluation of the dissertation work and contributions

The dissertation is 282 pages long as it contains two appendices. The bibliographic reference contains a total of 307 titles and regulatory acts, of which 234 in Latin, 29 in Cyrillic and 44 regulatory acts (cited from electronic resources).

The scientific work is structured into an introduction, four chapters, conclusions, conclusion, contributions, literature used and 2 appendices. The theoretical framework is presented in the first two chapters. In **the first chapter**, the author logically and consistently builds her concept in relation to the concept of inclusion through inclusive education. Some approaches, goals, dimensions, and principles of inclusive education are presented. The specifics of inclusive education in Bulgaria are outlined and attention is paid to the features related to the development of digital inclusive education. **The second chapter** examines the concept of personalized learning. Definitions of personalized learning have been derived. Extensive attention has been paid to the evolution, components, characteristics, and models of personalized learning. Special attention is paid to personalized learning as a factor for the inclusion of students with special educational needs. The design of the empirical study is the subject of **the third chapter**. I should note that the object, subject, goal, tasks, hypotheses, and contingent of the study are formulated with exceptional correctness. For the purpose of the study, an author's survey and author's scale were developed, the content of which was formulated through the prism of the research questions posed. The diagnostic tool "mind maps" was used with the central concept of "personalized learning", and a training experiment using a mobile application with artificial intelligence was also implemented. The analysis of the obtained results is presented in **the fourth chapter**. The data were interpreted quantitatively and qualitatively. They are illustrated using tables and diagrams, which makes them easier to understand. The dissertation ends with conclusions and findings. A total of 11 conclusions were drawn. The conclusions drawn give reason to assume that the objective of the study has been achieved.

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

Contributions of a scientific and theoretical nature are the following::

1. A comprehensive review of the scientific and normative literature on inclusive education in the world and in Bulgaria has been made in a chronological and prospective aspect.
2. A conceptualization of inclusive education in a broad and narrow sense has been introduced for the first time in Bulgaria.
3. A narrative and interpretive analysis of the concept of personalized learning has been implemented.
4. The issue of personalized learning with the application of digital technologies has been developed.

Contributions of a scientific and applied nature are the following:

1. An original diagnostic toolkit for reflection and perception has been designed and applied to personalized learning.
2. The effectiveness of implementing personalized learning using digital technologies for children and students with special educational needs has been established.

3. It has been established that the implementation of personalized learning as a factor of inclusive education is related to taking into account the strengths and potential of students with special educational needs in conditions of widespread digitalization of education.

There are five publications in total, and it is impressive that they are all on the topic of the dissertation.

7. Abstract

The text of the abstract accurately reflects the content of the dissertation.

8. Recommendations for future use of dissertation contributions and results

I know doctoral student Krasimira Ivanova as a responsible, conscientious, precise, and informed person regarding current issues in special education. Her research and articles are well-argued, methodologically and statistically sound, with results that are significant for theory and practice. I accept the doctoral student's dissertation as presented. I have no comments or questions. I recommend that a textbook or teaching aid be developed based on the dissertation work, which would be related to personalized learning for children and students with special educational needs. I also recommend that the doctoral student continue to expand the scope of her work with a focus on personalized learning for children and students with special educational needs.

CONCLUSION

The dissertation work *contains scientific and applied contributions that represent an author's contribution to science* and meet the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria (ADSRB), the Regulations for the Implementation of the ADSRB and the corresponding Regulations of the Paisii Hilendarski University.

The dissertation shows that doctoral student Krasimira Ivanova *possesses* in-depth theoretical knowledge and professional skills in the scientific specialty, *demonstrating* qualities and skills for independently conducting scientific research.

Given the above, I give my *positive assessment* of the conducted research, the achieved results and contributions and *propose to the esteemed scientific jury to award the educational and scientific degree of 'doctor'* to Krasimira Ivanova in the field of higher education: **1. Pedagogical Sciences**, professional field **1.2. Pedagogy**, doctoral program **Special Pedagogy**.

25.05. 2026 г.

Prepared the opinion:

(signature)

Assoc. Prof. Ivan Trichkov, PhD