

STATEMENT

by Assoc. Prof. Dr. Katya Dimova Getova-
Timcheva

for the dissertation on the topic: "A Model for Developing Practical and Cognitive Skills in 57-Year-Old Preschool Children for Orientation in Their Surrounding Environment" for the award of the educational and scientific degree "Doctor" to the doctoral candidate Zdravka Georgieva Kostadinova in the field of higher education 1.3 Pedagogy of Teaching in... (Methodology of Education in Kindergarten and Primary School in Technology and Engineering)

1. Subject of the review

By Order No. RD-38-677/10.12.2024 of the Rector of Sofia University "St. Kliment Ohridski," I have been appointed as a member of the scientific jury to ensure the procedure for the defense of the dissertation on the topic "A Model for Developing Practical and Cognitive Skills in 5-7-Year-Old Preschool Children for Orientation in Their Surrounding Environment" for the acquisition of the educational and scientific degree "Doctor" in the field of higher education 1.3 Pedagogy of Teaching in... (Methodology of Education in Kindergarten and Primary School in Technology and Engineering). The author of the dissertation is Zdravka Georgieva Kostadinova. The set of materials presented by the candidate on paper complies with the Regulations for the Conditions and Procedure for Acquiring Academic Degrees and Holding Academic Positions at Sofia University "St. Kliment Ohridski" and includes the following documents: 1) Curriculum Vitae; 2) Diploma for Higher Education and its annex _original for verification and 3 copies; 3) Dissertation in 4 copies; 4) Abstract in 5 copies in Bulgarian; 5) Published (accepted for publication) scientific papers; 6) Declaration of authorship in 5 copies; 7) Report on compliance with the national minimum requirements for the academic degree "Doctor" in the scientific field 1. Pedagogical Sciences in 5 copies. All documents are also presented in pdf format on 6 digital media. The materials have been presented with the necessary accuracy and precision.

2. Brief biographical data

Zdravka Georgieva Kostadinova is a lecturer in the Methodology of Professional Training at DIUU, Sofia University "St. Kliment Ohridski". She graduated in 1986 from the 9th FEI in Sofia. She then studied mechanical engineering at the Technical University of Sofia, Faculty of Energetic Engineering, graduating in 1994 with a specialty in Hydraulics and Pneumatics, Machine Engineer, She also completed a second degree in "Professional Pedagogy" in 1993 at the Free Faculty of the Technical University of Sofia.

She continued her education at Sofia University "St. Kliment Ohridski," Faculty of Primary and Pedagogy, where she graduated in 2001 with a Bachelor's degree in "Primary School Pedagogy". She began working in 1995 at the Central Institute of Computing as a designer. From 2001 to 2024, she was an assistant professor in the Methodology of Professional Training, Department "Transport" at DIUU, Sofia University "St. Kliment Ohridski". Since February 2024, she has been reassigned to the position of "lecturer."

3. Relevance of the topic

In recent years, a clear focus on the importance of education as a whole and the acquisition of practical and cognitive skills in 5-7-year-old preschool children for orientation in their

Zdravka Kostadinova has studied authoritative specialized sources. The theoretical analysis of orientation models in the surrounding environment, as well as existing models in pedagogical practice, indicates a consistent search for a solid scientific foundation and the development of scientific logic, which is adequately reflected in the structure of the dissertation. The author objectively presents the essence of the concepts with which she works, while also expressing her personal perspective.

4. Research methodology

The theoretical preparation of the author has allowed her to expand and justify the purpose of her research right from the introductory section. The object, subject, aim, tasks, and hypothesis are defined as a unified logical whole, not as separate constructs. Each research task is linked to specific methods and procedures. Criteria and indicators for checking the effectiveness of the proposed technology are derived, and the hypothesis is tested through statistical methods. Thus, the chosen research methodology allows for the achievement of the set goal and provides an adequate answer to the tasks addressed in the dissertation.

5. Characteristics of the dissertation

The choice of topic is essentially a challenge to the professionalism of the author. The dissertation consists of an introduction, three chapters, a conclusion, and a bibliography of 141 titles, 137 in Cyrillic and 4 in Latin script. The main text includes 54 tables and 81 diagrams. The total volume of the dissertation is 220 pages. The main text is 200 pages, and the appendices are 20 pages.

The dissertation is based on the following sources: Regulatory documents published by the Ministry of Education and Science related to the education of children and students from 2003 to 2023; Textbooks and teaching aids approved by the Ministry of Education and Science for the period 1972-2021; Monographs in Cyrillic published from 1946 to 2022; Refereed and reviewed scientific publications from journals, collections, and annuals from 2005 to 2023; Scientific publications from academic journals published on websites from 2010 to 2020.

The first chapter, "Theoretical Framework of the Problem," focuses on the theoretical analysis of the state of education in the areas of "Design and Technologies" and "Environment." Published textbooks and instructional literature for 5-7-year-olds and the main methodological aspects of the issues considered are reviewed. Constructivist approaches and their reflection in preschool education are studied. Psycho-physiological characteristics of the development of preschool children are presented.

In the second chapter, "Presentation of the Technology," the conceptual framework, content, and procedural parts of the technological model are designed. An algorithm for developing practical and cognitive skills in preschool children for orientation in the surrounding environment is presented, accompanied by specific teacher and learner activities, and methods and tools for teaching are planned.

The third chapter, "Conducting Empirical Pedagogical Research," formulates parameters, criteria, and indicators for the research. The methods for conducting the study are planned, and the necessary tools are developed. The focus is on creating a model for developing practical and cognitive skills for orientation in the surrounding environment, reflected through the training aid "Little Travelers" for 5-7-year-olds.

The dissertation demonstrates scientific-theoretical competence in the addressed problem, supported by the author's personal experience and awareness of various regulatory documents and educational materials. The applicability of the technological model has been tested. A model for safe behavior in an external environment has been presented and clarified, based on teacher training programs for preschool and primary school teachers. Products and results from conducted training programs are studied. Materials, mainly developed between 2014 and 2019, include 68 projects. The proposed technology, methods, and teaching tools have been

successfully integrated into the teaching process and contribute to building independent safe behavior in the external environment of children.

The pedagogical research was conducted in four stages: preliminary, confirming, formative, and control experiments. A diagnostic survey was conducted in the preliminary experiment to examine the knowledge and skills of 5-7-year-olds regarding safe behavior in an external environment. The results of the preliminary study (2014-2016) showed the need for changes in preschool education regarding the development of knowledge and skills for independent safe behavior in the real environment. A technological model for training based on a research approach was developed.

A study was conducted with 306 children aged 5-7, of which 139 were 5-6 years old, and 167 were 6-7 years old. Results from the confirming and control stages of the experiment for both groups are summarized. Achievements for the formulated parameters are grouped and illustrated with graphical representations. Similarly, results for the educational areas "Design and Technologies" and "Environment" for the two age groups are analyzed. Results on the competence of orientation in the external environment for both subgroups of 5-7-year-olds are analyzed according to the established parameters, criteria, and indicators. The results are presented through 54 tables and 81 diagrams.

Teachers from preschool and primary education were surveyed, and their impressions of the applicability of the research-based teaching model under the guidance of the instructor were analyzed. The results of the study regarding the criteria and competence for safe orientation in the surrounding environment of 5-7-year-olds were summarized. Conclusions, findings, and contributions to the dissertation are formulated.

6. Contributions to theory and practice

The scientific contributions of the dissertation are in the following areas: theoretically, they are related to the systematization of educational models, and practically, they relate to the development of teaching and methodological activities. An original technological model for developing practical and cognitive skills in 5-7-year-olds for orientation in the surrounding environment has been created and tested.

I have no critical remarks. The scientific production submitted for the competition does not contain significant weaknesses that would diminish its merits. I would recommend that the candidate replicate her experience in the pedagogical field. The analysis of the educational environment can also be considered original. The created pedagogical technology is innovative. Its practical significance in contemporary pedagogy defines the possibility of using it for developing and improving educational programs, textbooks, teaching aids, and methodological guidelines.

7. Assessment of publications related to the dissertation

The publications are related to the research presented in the dissertation. The results obtained are the personal achievement of the dissertation author.

8. Abstract

The abstract has been developed according to the requirements and reflects the main results achieved in the dissertation.

9. Recommendations for future use of dissertation contributions and results

The results can be used practically in updating educational programs, textbooks, teaching aids, and methodological guidelines.

CONCLUSION


The dissertation contains educational-methodological guidelines with scientific applicability in contemporary pedagogy, meeting the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDSASRB), the Regulations for the Implementation of LDSASRB, and the corresponding Regulations of Sofia University "St. Kliment Ohridski."

The dissertation demonstrates that the candidate Zdravka Georgieva Kostadinova possesses theoretical knowledge and professional skills in the scientific specialty of teaching methodology in kindergarten and primary school in technology and engineering.

For the above reasons, I give a positive evaluation of the conducted research, the presented dissertation, abstract, achieved results, and contributions. I propose to the esteemed Scientific Jury to award the scientific degree "Doctor" to Zdravka Georgieva Kostadinova in the field of higher education: 1. Pedagogical Sciences, professional field: 1.3 Pedagogy of Teaching in... (Methodology of Education in Kindergarten and Primary School in Technology and Engineering).

20.01.2025s

Reviewer:


Assoc. Prof. Dr. Katya Dimova Getova-Timcheva