REVIEW

By Prof. Dimitar Vesselinov, Dr.

On a dissertation on the topic: **"Model for the formation of 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 professional field 1.3. Pedagogy of education in…(Methodology of education in kindergarten and primary school in engineering and technology)

Candidate: Zdravka Georgieva Kostadinova, lecturer at Sofia University "St. Kliment Ohridski" – Department for Information and In-Service Training of Teachers

I. Brief biographical data of the doctoral candidate

Zdravka Georgieva Kostadinova is a lecturer of Methodology of Education of Professional Training at Department for Information and In-Service Training of Teachers, Sofia University "St. Kliment Ohridski".

In 1986 she graduated from the 9th French Language School in Sofia. She studied mechanical engineering at the Technical University of Sofia, Faculty of Power Engineering, where she graduated in 1994 with a degree in Hydro and Pneumatic Engineering, as a Mechanical Engineer. She also graduated in 1993 with a second degree in "Professional Pedagogy" at the Free Faculty of the Technical University of Sofia.

She studied at Sofia University "St. Kliment Ohridski", Faculty of Preschool and Primary School Pedagogy, Bachelor's degree. She graduated in 2001 with a degree in "Primary School Pedagogy".

She started working in 1995 at the Central Institute of Computing Technology as a designer. From 2001 to 2024 she was an assistant professor in Methodology of Education of Professional Training at Department for Information and In-Service Training of Teachers, Sofia University "St. Kliment Ohridski". Since February 2024 she has been reassigned to the position of "lecturer".

II. General evaluation of the dissertation work

The dissertation examines a current problem in the education of 5–7-year-old preschool children - building independent safe behavior of children in a real external environment. The presented work explores the possibilities of training for the formation of the necessary knowledge and skills through a research approach, applied under the direct guidance of the teacher.

The object of the research are practical and cognitive skills of 5–7-year-old children for orientation in the surrounding environment. The subject is the model for the formation of practical and cognitive skills in the children for orientation in the surrounding external environment, which are formed through the educational directions "Construction and Technologies" and "Environmental World".

The formulated goal of the dissertation is aimed at developing and testing a pedagogical model and conducting an empirical study of its effectiveness and analyzing the results of the research.

The scientific analysis is based on Bulgarian and foreign literary sources. The selected scientific content is targeted and related to the researched problems, and main highlights of strategic and normative documents are examined. Scientific statements from educational and

methodological literature, textbooks, publications related to the problems of teaching 5–7-year-old preschool children are presented. Active learning approaches and their impact on preschool education are studied. The references to the cited authors are in good faith.

Innovativeness of the research of the dissertation.

Originality of the dissertation.

1. The dissertation enriches the research on building knowledge and skills in 5–7-year-old preschool children for orientation in their surrounding environment.

2. A didactic model based on a research approach has been developed for the formation of practical and cognitive skills in preschool children for orientation in their surrounding environment.

3. A toolkit for the implementation of the didactic model has been developed and applied in pedagogical practice.

III. Assessment of the structure, content and conclusions of the dissertation

The dissertation has a total volume of 220 pages. The main text is 200 pages long, and the appendices are 20 pages long.

The study is presented in an introduction, three chapters, a conclusion and a bibliography of 141 titles, of which 137 are in Cyrillic and 4 in Latin. The main text includes 54 tables and 81 diagrams. The scientific tasks of the dissertation are consistent with the subject and purpose of the study. Regulatory documents published by the Ministry of Education and Science related to the education of children and students in the period 2003-2023 were analyzed; Textbooks and exercise books issued and approved by the Ministry of Education and Science for the education of children and students for the period 1972-2021; Monographs in Cyrillic published from 1946 to 2022; Refereed and peer-reviewed scientific publications from journals, collections, yearbooks from

2005 to 2023; Scientific publications from scientific journals published on websites from 2010 to 2020.

In the first chapter, "Theoretical formulation of the problem", the possibility of integrating the content of educational directions "Environmental world", "Construction and technologies" and safe movement on roads for children is considered. Educational and methodological literature, textbooks, publications related to the problems of teaching 5–7-year-old preschool children are studied. Basic concepts that build education, principles, approaches, organizational forms, methods and means of education in preschool education are studied. The main emphasis is placed on constructivist approaches in education, the views of Bulgarian and foreign authors on the researched topic are sought.

The second chapter, "Presentation of the technology" is structured in three parts: a conceptual framework, a content part and a procedural part. The conceptual framework clarifies the starting points and ideas for creating the technology. The content part summarizes the initial positions and guidelines for designing the technology.

The goal of the developed training technology is correctly formulated - the formation of practical and cognitive skills in preschool children for safe orientation and movement in the surrounding external environment. The realization and organization of the learning process is planned and consistent with the following tasks: The child to master the norms and rules of safe behavior in basic socialization processes, to understand and demonstrate safe behavior and compliance with rules when in an external environment and to interact with adults and peers, observing and evaluating behavior, commenting on the reasons that give rise to it.

The procedural part contains working algorithms of a model for the formation of competence in preschool children for orientation in the real external environment surrounding them and materials for the preparation and development of skills for the teacher.

In the third chapter, the PhD student brings out important aspects of the study. The parameters, criteria and indicators of the study are interrelated, with a visible logical connection

between them. The necessary research tools have been developed. The pedagogical study was conducted in the following stages: preliminary experiment, ascertaining, formative and control experiment.

The applicability of the technological model has been tested. The teaching technology, methods and tools proposed to the teachers have been successfully integrated by them into the learning process. The results of the ascertaining and control experiment have been analyzed in detail. The PhD student has summarized the results in charts and diagrams, the conclusions are based on the four stages of the pedagogical research.

IV. Specific results of the research

1. Strategic and normative documents, educational and methodological literature published in the period from 1972 to 2023 for educational areas "Construction and Technologies" and "Environmental world", preschool education were studied and analyzed.

2. The concept of "Competence for orientation in the surrounding environment in 5–7-year-old preschool children" was clarified.

3. A research-based didactic model has been developed for the formation of practical and cognitive skills in preschool children for orientation in their environment.

4. A toolkit for the implementation of the didactic model has been developed and applied in pedagogical practice, in the following parts: 1.1 Models for active learning in the development of practical and cognitive skills in preschool children for orientation in their environment 1.2 Guidelines for the teacher when conducting training of 5–7-year-old preschool children with the developed tool. 2. Toolkit for training of 5–7-year-old preschool children.

5. The results of all stages of the conducted research have been carefully analyzed, followed by specific conclusions.

V. Conclusion

In the presented work, Zdravka Georgieva Kostadinova shows knowledge of the problems and tasks for the formation of knowledge and practical and cognitive skills in preschool children for safe orientation and movement in their surrounding external environment.

The developed dissertation work on the topic "Model for the formation of practical and cognitive skills in 5–7-year-old preschool children for orientation in their surrounding environment" corresponds to the established criteria for awarding the educational and scientific degree "Doctor" in Bulgaria.

Due to the above, I give my positive assessment of the conducted research, dissertation presented above, achieved results and contributions, and I propose to the esteemed scientific jury to award the **educational and scientific degree "Doctor"** to lecturer Eng. **Zdravka Georgieva Kostadinova** in the field of higher education: 1.3. Pedagogy of education in...(Methodology of education in kindergarten and primary school in engineering and technology)

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Sofia (Prof. Dimitar Vesselinov, Dr.)