

REVIEW

by Assoc. Prof. Dr. Magdalena Stoyanova
PMP Department, FESA, SU "St. Kl. Ohridski"
of a dissertation on:

COMPETENCE-ORIENTED MODEL OF PEDAGOGICAL INTERACTION IN THE EDUCATIONAL FIELD "ENVIRONMENTAL WORLD" FOR 6-7-YEAR-OLD CHILDREN IN PRESCHOOL EDUCATION

Doctoral student: Blaga Georgieva Dimova

for the acquisition of the educational and scientific degree "Doctor PhD", field of higher education 1. Pedagogical sciences, professional field 1.2. Pedagogy (Preschool Pedagogy)

Research supervisor: Prof. Dr. Lyuboslava Peneva

As a member of scientific jury, approved by order № RD-38-556/26.09. 2022 of the Rector of SU "St. Kliment Ohridski" I received all the documents and materials necessary for the procedure.

1. Lawfulness of procedures.

Blaga Georgieva Dimova is a doctoral student in an unsupervised form of preparation in the department of PMP, FESA, SU "St. Kl. Ohridski" on the basis of the procedures of PPZRASRB and Rector's Order RD-20-1/04.01.2021. She was dismissed ahead of schedule by Order of the Rector of the SU "St. Kl. Ohridski" RD-20-1576/21.09.2022.

From the reference attached to the documents, it is clear that the doctoral student meets the scientometric indicators with her scientific production, in accordance with the minimum national requirements for awarding the ESD "Doctor PhD" (a total of 110 points) in Professional field 1.2. Pedagogy (Preschool pedagogy). During the verification of the originality of the doctoral dissertation, the following were found: a. the similarity coefficient 1 is 12.41% and does not exceed 50%; b. the similarity coefficient 2 is 2.98% and does not exceed 5%. This shows that the dissertation work on the commented was developed with scientific correctness.

The procedures for moving to the official defense of the doctoral student were carried out on time and in accordance with the regulations, as well as the delivery of the materials for public defense to the members of the jury, its construction in accordance with the election of the chairman, members for reviewers and members for the preparation of opinions, as well as for the timely provision for the public defense procedure of the materials for evaluation at the choice of the ESD "Doctor PhD".

2. Brief biographical data.

Blaga Dimova was born on 18.04.1984. In the period 2004-2008, she studied for a bachelor's degree at the University of Economics, Varna, in the Faculty of "Management", majoring in "Economic Management", obtaining in 2009 the Master's degree "Financial Management" at the Dimitar A. Tsenov Academy of Economics, Svishtov, Faculty of Finance.

In 2019, he acquired the Master's degree at the BU "Prof. Dr. Asen Zlatarov", Faculty of Social Sciences, specialty "Preschool and Primary School Pedagogy".

From 05.01.2021, she was enrolled in an unsupervised form of study at the Doctor's National Academy of Sciences in the Department of "Preschool and Media Pedagogy", FESA, SU "St. Kl. Ohridski" with order RD-20-1/04.01.2021 of the Rector of SU "St. Kl. Ohridski". After successfully completing the activities to meet the criteria for her attestations in the department, she was dismissed with the right of defense by order RD-20-1576/21.09.2022 of the rector of SU "St. Kl. Ohridski" and a successful approval held on 16.09.2022 at a meeting of the PMP Department, FNOI, SU "St. Kl. Ohridski".

The doctoral student has a certificate of acquisition of the fifth qualification degree (reg. no. 00826/October 20, 2020, UAZ series - 2020) from the University "Professor Dr. Asen Zlatarov" - DKPRPS, Burgas city, which demonstrates her growth in professional plan in practice.

In the period from 2020 until now, she has participated in 14 additional trainings to increase her qualifications, for participation in scientific forums and innovations in the preschool education system, the most significant of which are related to topics such as: educational work in kindergarten in a rich technology environment – working with an interactive board, tablets and educational software; kindergarten diagnostic procedures in the achievement tracking process; diagnosis and correction - positive education in preschool age; training of teachers to work with digital devices in kindergartens; internal organizational audit and certification of kindergarten personnel; innovative models for the formation of social skills in preschool age; working in an electronic environment in kindergarten; methodology for training children and students in road safety; school-kindergarten continuity; about aggression and aggressiveness; in the National Scientific and Practical Forum with international participation "Innovations in education and cognitive development"; for participation with a report in the second scientific-practical conference "Education and Arts: Traditions and Perspectives", Sofia University "St. Kliment Ohridski" FESA.

From the facts presented, one can see the purposefulness of the doctoral student in increasing her professional competences in connection with her pedagogical legal capacity and linking them to scientific and applied research, which she publicizes among academic circles during conferences.

3. General characteristics of the activity of the doctoral student.

3.1. Blaga Dimova has been working as a children's teacher in the kindergarten "Morska Zvezda" – Burgas, since 09/08/2017.

3.2. The educational and pedagogical activity of the doctoral student covers the period 2021-2022, when she participates as a part-time assistant in the specialties: Preschool and elementary school pedagogy; Social Pedagogy; Elementary school pedagogy and foreign language; Preschool pedagogy and foreign language. By successfully applying her experience gained from her scientific research activity at ESD "Doctor PhD", she brings up-to-date topics in the program in the study disciplines: "Pedagogy of the interaction "child - environment", "Methodology of education in "Environmental world" in the kindergarten" and on "Inclusive education".

3.3. Scientific and scientifically applied activity. The doctoral student has participated in four projects: project "There will be two of us in the garden - I'm leaving together with mom" - 2020-2021; NP "WE SUCCEED TOGETHER" Module 1, ranked first in the city of Burgas as a member of the project preparation committee; Mini-project "Little researchers" - 2019/2020 as a participant in an internal project; Mini-project "Workshop of Miracles" - 2018/2019 also as a participant in an internal project.

4. Evaluation of the dissertation work.

4.1. Structural characteristic: The author sets the problem of her research in a broad scientific context with the author's presence in an analytical plan. The dissertation is an impressive volume of 326 pages and in good proportion when differentiating the chapters and its overall layout - 231 pages of main text and 95 pages of an appendix of survey cards, tables and illustrative material from the formative experimental system, raw score of results used in the procedures of the experimental work.

I find it positive that the volume of the text of the work is dominated by the experimental part - chapters two, three and four, which are approximately in a ratio of 3:1 compared to the theoretical part. This creates confidence for the good preparation of the doctoral student in the implementation of her own research program and the proof of competences in the acquisition of the ESD "Doctor PhD" in a scientific-research and experimental-applied plan.

The used literature consists of 135 titles, incl. Web-based, of which Cyrillic - 106 sources, Latin - 12 sources. 13 cited legislative documents were used. The main text and appendices also include 48 tables, 61 diagrams, including 4 figures and 2 diagrams, as well as 153 photographs. All this shows the doctoral student's diligence to convincingly demonstrate the scientific research competencies required for this ESD "Doctor PhD", related to evidence and precision in presenting the results of the research.

4.2. The theoretical part of the research sets out comparative and interrelated studies, integrated appropriately as a solid basis of experimental research - existing concepts of authors at home and abroad for:

- ✓ the essence and specificity of working concepts in chapter one are covered competently and with an author's reading of views and proven hypotheses of researchers about the connection "competence-competency-competence approach-competence model";

- ✓ relatively generalized concepts of authors who work on the educational field "Environmental World" and prove in thematic content or in educational cores key competencies for the field and also have proven interactive models in the field;
- ✓ content analysis of works related to the general-psychological and general-pedagogical specifics of preschool age and the resulting trends for the key competencies in education in the 21st century;
- ✓ the competence-oriented approach, the types of competences (classification) with the achievement of a correct and objective analysis of the theoretical sources and with convincing adherence in the view of the doctoral student to the selection of the presented concepts;
- ✓ a comparative critical and evaluative presentation of the legislative basis of preschool education, bound to educational field "Environmental World", as well as standards for GEZIO, 2016 in their development over time and renewal;
- ✓ original comparative interpretation of program systems and knowledge books by author groups.

I find that all these advantages of theoretical-analytical research are a starting point for the systematization of the experimental program.

4.3. Characterization of the experimental part.

It is aimed at testing and evaluating the effectiveness of the developed author's innovative model related to the evaluation of competencies and their improvement. As I indicated above in my review, the doctoral student has managed to link her pedagogical professional realization with a scientific-experimental purposeful program, which has led to positive reported achievements in a formative plan.

I express admiration for the richly implemented experimental and scientific research activity in two central directions - the testing of a diagnostic toolkit according to the expected results in the "Environment" direction and a competence-oriented model for the implementation of the formative experiment. I also support these two options as aspects of the contribution nature of work.

The purpose of the research is variably oriented, which is inevitable, since the research takes into account different educational cores and the competencies in them in the single model of "Environmental World".

I would like to point out that the goal is tied to the object and the subject of the study - a current study and related research tasks set as a comparative analysis of the program systems leading to new thematic units in the educational content in the formative stage.

The hypothesis is *competently formulated* and seeks an answer to the relationship between the applied approach on which the experimental model is based in a research plan and its results as children's achievements - unity of knowledge, skills and attitude, cores of their competences.

I want to confirm that, in my opinion, there are used appropriate criteria and indicators (p. 76 - p. 82) resulting from research methods (p. 74), including reliable statistical methods (Student's T-criterion for significance of differences and Pearson correlation coefficient) for objective quantitative and qualitative presentation and analysis of results. Two groups were compared: an experimental group (EG) consisting of 105 children, and a control group (CG) consisting of 97 children, gender differentiation was also present. The opinion of 172 teachers in relation to task number 8, which is also related to task 9, was studied through a survey.

Two main stages - pilot and real research are included in the experimental program from 2018 to 2021, with the real thing taking place in the three experiments characteristic of pedagogical research - ascertainment/control and formative.

The competency-oriented experimental and author-realized model contains seven priorities. Its content includes 16 original and adapted thematic educational situations aimed at each of the 18 indicators of the selected criteria system. I appreciate positively as a contribution of the doctoral student that each of these situations contains a basic and a variable component. Her vision for informal application of the model, but for choice and guaranteeing the orientation of the subjects in their inclusion in it, is evident here. Thus, the structure and distribution of the basic and variable components is tailored and follows the logic of the competences contained in the model and their degree of formation. Its approval confirms the importance of social and civic competences and the competence to cultivate sustainable behavior and criticality towards the surrounding world, as well as to the protection of the environment and one's own health. Together with digital competence, they are brought out by the author as leaders for the quality of preschool education.

As an advantage of the model, I can share that the interpretation of the results of exit diagnostics in terms of the difference between the two groups is statistically significant ($t = 2.17$, $p = 0.032$), which confirms my beliefs as a reviewer in the effectiveness of the formative program on the selected contingent of children, also proven by the statistical analysis of the average arithmetic values in the experimental and control groups. For me, the most valuable and up-to-date for the educational situation in the country are the series of interactively applied media projects included in the diagnosis and in the formative stage of the experiment.

The opportunity to apply the competence-oriented approach in the time of organizing interaction with children in the conditions of Covid, which had an impact on their work, was reported in relation to the views of the educators. I also estimate this as an effect of the conclusions in the dissertation, as well as the fact that the achievement of bilingual children in the experimental group is also considered, and therefore this can be generalized as an effect of the model in the inference work.

The analysis of the results was carried out informatively and statistically confirmed by a quantitative analysis, providing the possibility of preparing summary reports (digital data, etc.) and graphs.

5. Contributions (scientific, scientifically applied, applied).

5.1. I confirm the contributions of a theoretical-methodological nature, emphasizing among them the content analysis of program systems and, more precisely, the third formulated contribution.

5.2. I confirm the contributions of a scientific-applied nature, emphasizing among them the experimental model in the formative part of the actual study.

First, the presentation of the results of tracking and reporting the lag or progress in relation to the competences brought out in the work is very impressive and precisely implemented.

Secondly, here I want to emphasize a new system for the improvement of social and civic competences, the competence for a sustainable attitude towards the environment and criticality towards one's own health and the health of others, which have been experimentally verified in an author's way.

Thirdly, an expedient diagnostic toolkit in the form of didactic tests was applied, combining an existing visual basis.

5.3. I also consider contributions of a practical-applied nature. Here I emphasize a developed digital program and its functionalities. I find that with the practical applications, illustrative tools and procedures, the dissertation will be useful for lecturers, students and teachers.

In general, the impressions of the layout of the work are excellent in graphic and illustrative terms.

6. Publications of the doctoral student.

Regarding the subject of her dissertation, the doctoral student has a total of 3 publications, two of which reflect her participation in scientific conferences, and the first one is in a prestigious scientific-methodological publication, namely:

- Improving the competences of preschoolers outside of pedagogical situations (2021);
- Practical parameters of digital competence in preschoolers (2021);
- Opportunities for formation of sustainable development skills in preschool (2022).

Content-wise, they reflect the main research orientations in Blaga Dimova's doctoral program and her attempts to announce the stages of her research to our pedagogical community.

7. Personal qualities of the doctoral student.

My impressions of the doctoral student are positive from her scientific presence in the life of the Department and from her participation in scientific conferences at FESA. She establishes herself as a researcher who tries to combine her scientific-research and scientific-practical skills to support children's teachers in institutions.

From the presented data and her biographical reference and from her publication activity, her ability to combine professional interests and subordinate them to the institution in which she is daily present is also evident.

8. Questions and recommendations for the doctoral student.

When outlining the positive evaluations of the research, I indicated the possibilities for future follow-up and generalization of the results in the direction of the application of the model in health-critical situations noted by the doctoral student during the Covid-pandemic in the institutions, as well as in the direction of working with bilingual children . I understand that these were not specific research tasks in the current dissertation, but their interpretation will be also useful for practice.

For me, the results of applying the model and digital competence in the experiment and their interpretation were interesting. In connection with this, I also have the following questions for clarification:

1. Do you have specific examples of where, in your opinion, the connections between children's achievements in the formation of social and civic competences and digital competence are more convincingly expressed, on the one hand, and on the other - between ESD skills and digital competence, in accordance with regulatory requirements, age, current time and in perspective?

2. Where in a formative plan are they realized media-projectively more successfully?

Conclusion: Bearing in mind the above, I give a **positive assessment to the dissertation work** and propose to the scientific jury to award the ESD "Doctor PhD" field of higher education 1. Pedagogical sciences professional field 1.2. Pedagogy (Preschool pedagogy) of doctoral student Blaga Georgieva Dimova.

29. 09. 2022

Reviewer:

(Assoc. Prof. Dr. Magdalena Stoyanova)