## **OPINION**

from Assoc. Prof. Dr. Gencho Vassilev Valchev
about a dissertation on a topic
"STRATEGIES FOR TEACHING STUDENTS WITH DYSLEXIA AND DYSCALCULIA"
for awarding the educational and scientific degree "Doctor"
in the professional field 1.2. Pedagogy(Special pedagogy)

Doctoral student: Dimitra Evangelos Kokara Scientific supervisor: Prof. Milen Zamfirov Zamfirov,DSc

# Compliance of the procedure with the current regulations

By order No. RD-38-445/ 19.07.2024 of the Rector of SU "St. Kliment Ohridski" according to the procedure for the defense of a dissertation work on the topic "Strategies for teaching students with dyslexia and dyscalculia" by Dimitra Evangelos Kokara, full-time doctoral student in professional direction 1.2. Pedagogy /Special pedagogy/ with studies in English, with academic supervisor Prof. Dr. Milen Zamfirov Zamfirov, for awarding the educational and scientific degree "Doctor", I have been appointed as a member of the scientific jury for this defense.

The set of materials presented for evaluation and drafting of an opinion is in a format and with content that corresponds to the ŽRASRB and the Regulations for the Development of the Academic Staff of SU "St. Kliment Ohridski". In addition to the dissertation (in English), the PhD student's abstract and current CV are attached.

### Actuality of the issues of the dissertation work

The relevance of the researched issues is argued by the importance of several substantive perspectives defining the parameters of the scientific field in which the dissertation research was developed: 1) Dyslexia and dyscalculia are the result of a complex combination of cognitive, linguistic and neurological factors that significantly affect academic achievements, including mathematics; 2) Dyslexia and dyscalculia manifest in similar cognitive and academic deficits, which is a prerequisite for creating more unified educational and therapeutic strategies that cover a wider perimeter of learning disabilities, improving complex cognitive skills and academic achievement with an emphasis on mathematical abilities.

In this context, the topicality of the topic and its dissertability are beyond doubt.

#### Structure and content of the dissertation

The design of the dissertation has a modernized, but still classic structure and includes an Introduction, two main separate parts: Part A – contains a theoretical overview of the research problems (includes 3 paragraphs, structured as chapters,

according to the parameters of the problem); Part B - Research approach (includes the methodological parameters and the research program; research results - quantitative, qualitative analysis and interpretation of the obtained data, author's proposals and recommendations for integrated educational strategies and creation of a supportive learning environment that helps children reach their full potential potential); List of used information sources (153 sources).

The dissertation contains 164 pages of main text, which represent the main part of the development. The text includes 26 tables and 14 figures. Structurally, the dissertation is logically constructed and well balanced.

The structure and content of the first part (in fact, the literature review of the issue begins in the Introduction) of the dissertation work is a demonstration of good awareness and knowledge of the basic and current scientific issues in the two areas on which the research concept is built:

- 1) Dyslexia and strategies for teaching children with dyslexia;
- 2) Dyscalculia and strategies for teaching children with dyscalculia;

Pedagogical and therapeutic intervention strategies to improve elementary school students' mathematics learning and the relationship between cognitive function and academic skill development in students with dyslexia and dyscalculia were analyzed. It is suggested that teachers need specialist training to be able to effectively support students with dyslexia in the classroom.

A good knowledge of the educational resource of students with dyslexia and dyscalculia, determined by the specificity of their cognitive resource, is linked to sufficient competencies in the field of intervention strategies for teaching students with these disorders.

The approach to selection, systematization and analysis of scientific information shows knowledge of the specific issue, as well as formed skills for working with sources of scientific information.

The research program is presented in the second separate part of the dissertation development. The goals and tasks of the research (announced already in the introduction) fully correspond to the declared working hypotheses. They are correctly formulated and define the emphasis of the research program.

The research program is developed in detail and structurally represents a structure of research phases. Empirical research has well-considered chronological parameters. The toolkit is developed precisely, the research procedures are correctly and detailed described. The statistical methods used for data processing are adequate to the research objectives.

The results of the research are presented in a separate structural part of the dissertation (part B): quantitative and qualitative analysis of the results, author's proposals and recommendations, discussion of the research results are presented. The differentiation of the focus areas of the analysis is in accordance with the purpose of the research. Statistical methods are highly accurate and allow for variable data analysis. Prospects for teaching students with dysgraphia and dyscalculia are commented, examining and analyzing the role and problems of teacher training. The interpretation of the data was performed competently, the generalizations and conclusions made are a serious basis for the recommendations made.

# Scientific theoretical and practical contributions

Contributions are presented only in the dissertation, but absent in the abstract.

The contributions of Dimitra Kokara's dissertation are of a complex nature:

- 1) to the scientific theory of the problem of pedagogical and therapeutic intervention strategies to improve the learning of elementary school students, as well as the relationship between cognitive functions and the development of academic skills in students with dyslexia and dyscalculia.
- 2) contributions of a practical-applied nature.

I accept the validity of the contributions that Vaia Tzoka has formulated with the caveat that the formulations could have been more precise. I attribute the inaccuracies to linguistic deficiencies and do not take them as a development weakness.

I want to note that in presenting the contributions of the dissertation work, the doctoral student was objective and did not exaggerate the merits of the dissertation.

#### Abstract

The author's abstract is in a format and with content that meet the requirements of ZRASRB and the Regulations for the Development of the Academic Staff of SU "St. Kliment Ohridski". Its content accurately reflects the presented dissertation work.

# Publications on the topic of the dissertation (content and fulfillment of scientometric requirements).

3 publications on the topic of the dissertation are presented. The content of the publications is consistent with the problem areas covered in the development. According to this indicator, the normative scientometric requirements are met.

# **Personal impressions**

I do not know the PhD student Dimitra Kokara and I have no personal impressions.

## Notes, recommendations and questions

An interesting research approach is the placement of research questions in the research methodology, and I do not dispute its modernity and effectiveness.

#### Conclusion

My assessment of the submitted dissertation is based on the following markers:

- 1. Compliance with the regulations of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB) and the Rules for the Development of the Academic Staff of SU "St. Kliment Ohridski". The submitted work and publications fully comply with the regulatory requirements.
- 2. Contributions. The scientific results achieved in the dissertation work are significant for special pedagogical theory and practice.
- 3. Design. Content structuring and layout are done precisely and competently.

Doctoral student Dimitra Kokara possesses the necessary resource of theoretical knowledge and professional skills in the scientific specialty Special Pedagogy and demonstrates qualities and skills for independent conduct of scientific research. This gives me reason to propose to the respected scientific jury to give a positive vote for awarding the educational and scientific degree "doctor" to Dimitra Evangelos Kokara in the field of higher education 1. Pedagogical sciences, Professional direction 1.2. Pedagogy.

	Assoc. Prof. Dr. Gencho Vassilev Valchev
Stara Zagora	
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