

REVIEW

by Assoc. prof. Diyana Georgieva

of a dissertation for the award of an educational and scientific degree "Doctor"

in the field of higher education 1. Pedagogical sciences

professional direction 1.2. Pedagogy

doctoral program *Special pedagogy*

Author: *Aikaterini Panayotis Tsalokosta*

Topic: *„Model of differentiated learning in Greek language and literature for secondary school students with dyslexia”*

Research supervisor: Assoc. prof. Anna Konstantinova Trosheva-Asenova

By order № ПД-38-592/ 24.10.2023 of the Rector of Sofia University „Sv. Kliment Ohridski“, I am included in the scientific jury of *Aikaterini Panayotis Tsalokosta* in the procedure for the defense of a dissertation work for obtaining the educational and scientific degree „Doctor“. Aikaterini Tsalokosta is a full-time doctoral student in professional field 1.2. *Pedagogy (Special Pedagogy)* at the Faculty of Educational Studies And The Arts.

1. General description of the presented materials

The presented set of materials on electronic media includes the required documents according to the specific requirements of the Faculty of Education Sciences and Arts.

2. Brief biographical data for the doctoral student

The professional biography of Aekaterini Tsalokosta is presented with a few strokes.

The educational profile of the PhD candidate includes a bachelor's degree in *Classical Philology* in (2009) and a master's degree in *Psychology* (2015). The PhD student has successfully completed educational programs in *Counseling, Psychometrics and Crisis Management* (2009), *Teaching Greek as a Foreign Language* (2019) and *Training in Intercultural Education* in the same year. The completed training course in psychology (2018-2022) contributes to increasing the level of her expertise in this field. In the period 2019 - to the present moment, she has expanded his scope of competence after enrolling in a doctoral program in Special Pedagogy at Sofia University „Sv. Kliment Ohridski“.

Her professional career started in 2011 as an Administrative Secretary in the General Construction and Public Works sector and continued until 2013. Since 2009, she has been working as a philologist in private practice, after which she continues to practice the profession of teacher in a general education school until 2023.

The short autobiography provided by Aikaterini Tsalokosta gives me reason to believe that the developed dissertation research is the result of the accumulated practical and theoretical experience of a specialist, which is realized in the educational and scientific field.

3. Relevance of the topic and appropriateness of the set goals and tasks

The relevance of the dissertation work is determined by the importance of the problem under consideration and the emerging need for the solution of the general and private problems identified in it, which are key to theory and practice. The submitted dissertation is in accordance with the stated conditions for topicality, usefulness and relevance. The increasing number of children with dyslexia worldwide and the heterogeneity in this population provoke an increased research interest in this type of disorder. Studies of dyslexia gradually condition its positioning in a wider context of the modern stage. The diagnostic criteria are specified, which provides opportunities for the development and validation of the methodology of differentiated training in the academic preparation of students at the general education school.

4. Knowing the problem

The author's knowledge of the problem is proved primarily by his professionalism, orientation to the issue under consideration, the content and high quality of the work. Doctoral student Tsalokosta shows in-depth scientific and theoretical knowledge of the researched issues and the academic literature dedicated to the complex phenomenon of dyslexia with an overall impact on the school functioning of children, on the one hand, and reliable models, strategies and technologies for their academic support – on the other hand.

They have been demonstrated solid practical skills and ability to perform independent research, analysis, and offer adequate recommendations.

5. Research methodology

The description of the selected research methodology includes elements reflecting the application of the quantitative and qualitative approach.

- An adapted to the Greek educational conditions version of the administered questionnaire, made up of 7 sections. The instrument is designed to measure specific parameters.

The first section offers information on the demographic characteristics of the study participants and their expertise in special education and the implementation of differentiated instruction strategies in the classroom. *The first* and *third research questions* are answered. A clear answer to *the second research question* is provided by 3 items (6a, 7a, 10) forming **the second section**. They were borrowed from the Pavlidis (2000) questionnaire and were designed to assess the level to which teachers demonstrate knowledge of the phenomenology of dyslexia. In **the third section**, a tool for evaluating different aspects of differentiated learning is applied – *Teachers' Differentiated Scale, TDS*. The rating scale developed by Siam and Al-Natour (2016) contains 65 items systematized into 6 subscales. It was used for statistical verification of *all research questions*, as the result of their grouping is the appearance of the general dependent variable in the quantitative component of the study. In the third section, there are 14 more items (referring to the challenges faced by teachers in the course of implementing differentiated instruction) related to *the fourth research question*, and 19 items (about the strategies for applying differentiated education) in addition to the answer to *the second research question*. **The fourth section**, related to teachers' self-assessment of their effectiveness, includes a specific scale *Teachers' Sense of Efficacy Scale, TSES* (Tschannmen-Moran Noy, 2001) of 24 items distributed in 3 subscales. The diagnostic tool was designed to control *the fifth research question*. In the content of **the fifth section** is inserted a scale for measuring teachers' beliefs about their teaching activity – *Teaching Beliefs*

Scale, TBS (Wolley et al., 2004), which includes 34 items classified into 4 subscales, of which 2 are in support of answers to **research question 6**. In **the sixth section** of the questionnaire there is a domain that belongs to a questionnaire known as the *Index for Inclusion* (I.F.I & BDA Dyslexia Friendly Quality Mark for Schools, BDA). The subscale (of 10 items) is designed to assess the supportive environment in school structures where children with dyslexia are educated. To answer **the 7 research question**, a supplement of a structured protocol consisting of 18 topics – distributed in 4 subscales: leadership and management (1, 2, 3, 4), quality of learning (5, 6, 7, 8,9 , 10, 11, 12), creating of climate of learning (13, 14, 15), and partnering with parents/caregivers (16, 17, 18). In **the last section**, named *Relationship between Differentiated Instruction and Dyslexia*, a question was formulated to examine the level to which teachers share an opinion about the positive effect that the model of differentiated teaching reproduces on the academic performance of students with dyslexia in the subject *Greek language and literature*. The data are in response to **research question 8**.

The performance of the entire questionnaire is aligned with the 4- and 5-point psychometric Likert scale.

- A semi-structured interview (with open-ended questions) with a focus on exploring teachers' attitudes, views, beliefs and implementation of teaching strategies. The interview is composed in 4 sections. The collected data in the first section is traditionally aimed at identifying demographic characteristics. The questions in the second section are devoted to teachers' interpretations of the term differentiated teaching and its role in managing the existing variety of verbal behaviors in school. In the third section, the formulations are intended to explore the views of teachers regarding the variable educational needs of students with dyslexia in the course of learning Greek language and literature, which necessitate the differentiation of learning. In the third section, the questions refer to the organization and implementation of the differentiated education of students with the considered communicative disorder in terms of: educational content, curriculum, goal setting, educational materials, specific strategies and technologies, assessment of achievements. Emphasis is also placed on the factors influencing the differentiated teaching style. In addition, an opportunity is provided for additional comments on the issues under discussion.

6. Characterization and evaluation of the dissertation work

The dissertation work, as an independent scientific and applied research, includes an introduction, 4 chapters, a conclusion and recommendations for practice, a list of used literature and applications. This is achieved within the entire volume of 175 pages, accompanied by 18 figures and 49 tables, with the creative dissection of 148 literary works. The selected method of references and citations of authors and publications allows to establish their correct use and reflection by the doctoral student.

The introduction of the dissertation includes the doctoral candidate's persuasive statements regarding all the elements that shape its content: relevance, social and scientific significance of the topic, the purpose of the work, as well as the state of development of the scientific problem, which refers to differentiated learning as a highly effective pedagogical philosophy integrating those aspects that allow the administration of a teaching and learning model that accepts the wide palette of students' differences, and transforms the school space into a multifunctional environment.

In **the first chapter** of the dissertation, the phenomenology of dyslexia is examined. Basic concepts and categories that are used in a theoretical-applied context are defined. A focus is also placed on the etiological aspects and taxonomic models of dyslexia. An

analytical analysis of the characteristic manifestations of dyslexia, as one of the most widespread disorders in the general child, adolescent and adult population, was made. A comprehensive picture of the overall functioning of children with written communication disorders is presented, covering a wide range of components: cognitive, emotional, social, communicative. The need for competences to recognize the specific verbal behavior of the children with dyslexia and their personal learning style, and on this basis – application of effective teaching strategies and effective communication therapy is substantiated.

The second chapter enriches the theoretical framework of the study with content reflecting the role of differentiated learning as an approach that allows creating a coherent system of pedagogical interaction that corresponds to the diverse needs of children. A key point in this part of the dissertation is the general principles and conditions for differentiation, as well as the sectors in which this flexible pedagogical technology is applied to children with dyslexia. The reader's attention is drawn to the two main directions included in the scope of differentiated instruction: (1) personalization of methods, strategies and techniques in response to students' need for the formation of universal learning skills and participation in unique educational trajectories; (2) organization of educational activities in the classroom, related to the creation of prerequisites for the development of children's abilities and interests, which are directly related to their motivation. The factors determining the successful implementation of the model of differentiated education are widely discussed.

The third chapter is devoted to the methodology of the empirical research. The main problem area has been specified, 8 research questions have been specified to receive a statistically guaranteed answer. The formulated goal, the raised two hypotheses and the defined research tasks, gravitating around the creation and approbation of a model for differentiated teaching of students with dyslexia in the regular classroom, are a logical consequence of the critical analysis of literary achievements. The representative sample includes a sufficient volume of 109 teachers, teaching on the territory of the Republic of Greece at the secondary level of school preparation. The demographic profile of the research participants (according to gender, calendar age, educational level, teaching experience, qualification in special education, experience in differentiated education) was analyzed in detail, which supports its credibility. The text in Chapter 2 is supplemented by the description of a compact sample of 6 teachers (specialists in the field of special education) for the purposes of qualitative analysis. Quantitative and qualitative approaches to data collection, processing and interpretation were used. I highly appreciate the intervention scheme described by the doctoral student with the application of the differentiated approach in the academic preparation of students in the ordinary classroom. The organized and conducted 28 training sessions are subjected to a detailed description. The focus is on content, specific strategies, linguistic and didactic material – components subordinate to the resources of the differentiated classroom. Statistical analysis was performed using SPSS. After initial descriptive statistical analysis, inductive data analysis was applied to test the research hypotheses. Statistical procedures used included Pearson's correlation coefficient, T-test, ANOVA, and regression analysis.

The fourth chapter of the dissertation presents the analysis of the obtained results by using a mixed quantitative-qualitative strategy. This allows the distribution and interpretation of the empirical research data in two blocks: quantitative and qualitative. All research questions receive a statistically sound answer. In this extremely important part of the dissertation work, the discussion component is duly represented, as well as the interpretation of the statistical facts, which I value. Combining the results leads to the generalization about the low frequency of application of the differentiated approach in the educational preparation

of Greek language and literature. The doctoral student has identified the most important factors determining the situation, among which the lack of knowledge about the nature of differentiated learning and the phenomenology of dyslexia show their dominant character. The doctoral student's insights on the optimization of this indicator include the requirement to emphasize the special training of teachers, increase their self-assessment of effectiveness in teaching, change their vision regarding the use of non-traditional technologies in the formation of competences in the teaching of Greek language and literature. These findings are supported by the data from the observed dynamics in the academic performance of students with dyslexia in Greek language and literature. The results of the applied pedagogical intervention marked a positive trend, which is a clear proof of the indisputable resource of differentiated learning as a flexible model for improving their abilities to carry out reading and writing instructions, and for the manifestation of critical thinking in relation to literary texts and scenarios.

In **the conclusion** of the dissertation, opinions and proposals of the doctoral student crystallize, based on generalized conclusions for determining the trajectories for optimizing the researched problem – enriching the knowledge of teachers about the communicative disorder *dyslexia* in all its aspects; rethinking views on models of pedagogical interaction; search and adoption of effective strategies and technologies for differentiated teaching of students with dyslexia in Greek language and literature in the regular classroom, in order to get out of the model of the „sterile“ and strictly fixed according to the doctoral student teaching the learning material. In a more global context, this is related to cardinal changes in the Greek education system, providing greater freedom and autonomy to teachers in the general education school.

7. Contributions and significance of the development for science and practice

The evidentiary material presented in the dissertation work offers me a serious argument for formulating contributions, the taxonomy of which covers three areas: theoretical, methodological, scientific-applied.

(1) Based on a systematization of scientific facts regarding the phenomenon of dyslexia in its definitive, etiological, taxonomic, diagnostic and therapeutic context, and on a thorough analysis of the communicative disorder, a compact profile of children has been formed, covering a wide range of cognitive, social, behavioral, emotional and language patterns.

(2) The theoretical framework related to differentiated instruction as a flexible and adaptive approach to teaching that allows taking into account the diverse needs, abilities and interests of students in the classroom is enriched.

(3) Through an applied creative approach, the content of a methodical system and toolkit for identification, assessment and therapy of dyslexia in secondary school students was developed.

(4) A three-component model of differentiated training in the subject *Greek language and literature* was proposed and approved to optimize the teaching activity of teachers working in the structures of the middle course of school education in the Republic of Greece.

(5) Clusters of factors have been clearly identified that exert an influence on the realization of differentiated learning in students with dyslexia from the middle level of school education, in the course of their preparation in the subject of *Greek language and literature*.

The outstanding contributions and the results obtained are a personal merit of Aikaterini Tsalokosta and provide a solid perspective for the implementation of differentiated education in the course of the academic preparation of the students in the study *subject Greek language and literature*.

8. Evaluation of publications on the dissertation work

The PhD student has proposed 3 publications in the period 2020-2022, presented in national journals. They reflect the individual stages of the author's activity regarding the theoretical and empirical block of the study. All are with her independent participation and correspond to the subject of the dissertation study.

9. Abstract

The abstract, which reflects the content of the dissertation, is distinguished by the consistency of the exposition and presents all the most important components of its structure.

10. Recommendations for future use of dissertation contributions and results

The established trends in the dissertation work are sufficiently justified to serve to enrich the knowledge about the differentiated approach in the education of students with dyslexia in the middle course of the general education school. The verified data are a valuable basis for developing relevant educational programs on the subject of Greek language and literature with the application of a three-component model of differentiated learning, integrating organizational, content and technological aspects.

Aikaterini Tsalokosta's experimental study represents a successful attempt to formulate questions and outline problematic topics for discussion that will provide an impulse for new research by professionals, teachers and representatives of the academic community related to the overall success of students with dyslexia.

CONCLUSION

The dissertation contains **scientific, scientific-applied** and **practical-applied** results and is at a scientific level, corresponding to the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB), the Regulations for the Implementation of LDASRB, as well as the specific requirements of the Faculty of educational sciences and the arts. The dissertation work also establishes that the Tsalokosta PhD student can effectively research, analyze, systematize, make sense of, and interpret research results consistently, comprehensibly, and precisely.

Given the stated arguments and the general positive impression of the doctoral student's competencies, **I propose to the honorable scientific jury to award the educational and scientific degree "Doctor"** to Aikaterini Panayotis Tsalokosta in the field of higher education: 1. Pedagogical sciences, professional direction 1.2. Pedagogy, doctoral program *Special pedagogy*.

29/12/2023

Reviewer:

/Assoc. Prof. Diyana Georgieva/