

REVIEW

From: Assoc. Prof. Stela Ivanova Baltova, PhD Scientific Specialty 3.8 Economy

Subject: Dissertation on "**Communication Policy and Training in the Digital Environment (Following the Example of Vocational High Schools)**") for the award of the educational and scientific degree "Doctor" in the Field of Higher Education 3. Social, Economic and Legal Sciences, professional field 3.7. Administration and Management, Scientific Specialty (PhD Program) "Administration and Management (Business Administration)".

Author of the dissertation: Rумыana Lyubomirova Antova

Supervisor: Prof. Lalka Borisova, PhD

Reason for submitting the review: member of the Scientific Jury according to Order No. 2/07.01.2025 of the Rector of IBS and decision from the first meeting of the Scientific Jury dd. 14.01.2025.

1. Brief bio information about the PhD candidate

PhD student Rумыana Antonova studied in the PhD program "Administration and Management (Business Administration)" at the International Business School in the period 2022 – 2025. She holds a Master's degree in Project Management and a Bachelor's degree in Business Administration from the same university.

Currently, Rумыana Antova works as a senior teacher of theoretical professional training at the Elisaveta Vazova Vocational School of Design, where she has spent most of her professional career as a teacher. Her activity in participating in project activities of the school where she teaches, in collaboration with higher education institutions in Bulgaria, is impressive. She has completed a number of short-term training and qualification courses related to the education system. These biographical data show Rумыana Antova's interest in the topic of the dissertation, the choice of which was obviously contributed by her rich professional experience in the subject of the dissertation. I have known PhD student Rумыana Antova since her student years as her teacher, as well as during our joint work with the School of Design, whose partner is IBS, and I have the best impressions of a very thorough person in his training, responsible and with the potential for a scientific career.

Doctoral student Antova has successfully passed all exams from her individual training plan and has completed the planned activities. She has taken part in several international scientific conferences. 4 publications are presented in scientific journals, three of which are in refereed journals and one is a monograph. These data show that the minimum national

requirements under Art. 2b, para 2 and 3 of the Law on Academic Staff Development in the Republic of Bulgaria for obtaining the educational and scientific degree "Doctor".

2. General characteristics of the presented dissertation

The dissertation is 180 pages long, 159 of which are main text, 13 pages are a list of information sources and references. It is structured as follows: introduction, main text, systematized in three chapters, conclusion, bibliography, appendices and summary. Appendices in total 3 pcs. of 8 pages long contain research questionnaires. The scientific study and the results obtained are well illustrated with 62 figures and 1 table in the main text. A list of abbreviations used in the dissertation, of the figures and the table is presented.

A positive impression is made by the use of a wide range of both scientific sources and normative documents relevant to the studied thematic area, publications in the mass media, which are evident to be necessary to argue the theses of the PhD student. A total of 103 literary sources were used, incl. 19 in English and 84 in Bulgarian. 65 of the sources are identified as references.

The dissertation is formatted according to the technical requirements, together with the abstract and the presented 4 scientific publications on the topic, are a finished product of independent scientific research.

Despite the variety of publications in the field of communication policy and training in a digital environment over the past 15 years, and especially, as the PhD student points out, after the beginning of the Covid-19 pandemic, the research interest in the topic, and specifically with regard to vocational high schools, determine its relevance.

The introduction presents the relevance of the topic, the degree of development of the problem and a review of scientific literature on the topic, the main research thesis and research questions, the object and subject of the research, the purpose and objectives of the dissertation, the structure of the dissertation. Already here, the PhD student defines the practical and applied nature of her work by drawing attention to the fact that the results of scientific research dedicated to pedagogical communication in the context of digitalization, and in particular its effectiveness, should find a place in the development of policies for building personalities capable of coping with the challenges of the constantly changing environment. "The enormous responsibility for creating motivated young people capable of coping with these challenges of high competition falls on schools, in particular vocational high schools," emphasizes this part of the work.

The main objective of the dissertation research is clearly defined "to investigate and evaluate the effectiveness of current communication policy at different levels, especially teacher-student communication, and to identify the need to update and optimize communication methods and tools in the digital learning environment to achieve educational goals." (p. 7 in the dissertation). Three aspects of the main goal are formed, a construction that allows the study to be more concrete and at the same time comprehensive in its entirety. To achieve the goal, five research tasks have been formulated, which have been completed within the framework of the dissertation.

The **defended research thesis** of the dissertation is that "digitalization of education and the replacement of conventional methods of communication at different educational levels in vocational high schools is an opportunity to improve its quality in accordance with European and world standards." (p. 8 in the dissertation). Two clear research hypotheses are formulated in the work. Very synthesized and correct in the introduction, the author presents the main aspects of the research methodology. The limitations of the study are clearly stated.

In its entirety, the dissertation has a practical and applied scientific character.

3. Evaluation of the obtained scientific and applied scientific results

The exposition of the dissertation is presented in three chapters, a good balance is achieved in terms of their volumes.

The first chapter is devoted to the clarification of the theoretical concepts related to communication policy in vocational education and training, the role of communications in creating a highly positive organizational culture. Attention is paid to the importance of emotional intelligence for achieving effectiveness of the communication process in order to build and maintain a high image of the educational institution for attracting motivated young people. The dissertation is paralleled with Business Process Management (BPM), where different approaches are used, suitable for application in vocational high schools. Quite logically, based on the analysis of literary sources, critical attention has been paid to the possibilities for the application of digitization in education, with an emphasis on the methods and means of pedagogical communication in a digital literacy environment, as well as on the specifics of the behavior of the digital generation. An author's scheme for classification of internal communications in vocational high schools, a specific object of the study, is proposed. The emphasis in the activities to increase the image of the professional gymnasium is placed by the author on internal factors and their interaction. From the critical literary analysis carried out, the author concludes that two key factors are essential for conducting effective digital

education that meets European and world standards: good technical provision and digital competence of the participants in the process. The author's opinion is reflected that digitalization, including the future digitalization of Bulgarian schools, will facilitate access to education in the native language for Bulgarian children, living abroad and children with disabilities. It is proposed to create healthy practices/observance of digital hygiene for working in a digital environment in order to protect against the negative effects of digitalization.

Each chapter in the dissertation ends with conclusions that systematize the main results of the implementation of the tasks set in the study.

In **the second chapter** of the dissertation, the doctoral student was able to present the choice of research methods in a very well-argued manner. The main focus is given to the presentation of the historical development of the main object of the research – the Elisaveta Vazova Vocational School of Design, where the results of the study are approbated, as well as its organizational and managerial structure, with the assumption that "the communication levels for business communication correspond to those of the management structure and we will consider and study them in this way" (p.64 in the dissertation). Schools in Sofia and in the country are also presented, which were also studied for the purposes of the study.

Based on the areas of communication within the educational qualification degree of the professional school, the internal communications within the school are analyzed and categorized based on the criteria specified in the first chapter of the dissertation. Regardless of whether the communication develops between the pedagogical staff, the non-pedagogical staff or between members from the two groups, the internal communications in the PG are divided into two main categories: **formal and informal**.

An important contribution of this chapter is the analysis of the results of the empirical study conducted with two target groups – pedagogical specialists and students, which aims to assess the effectiveness of the communication policy in the object of the study. The applied qualitative and quantitative methods, in compliance with ethical norms, allow obtaining information, the results of the analysis of which show that the majority of research tasks have been completed. The conclusions at the end of the second chapter are objective and allow for an elegant transition to the third chapter, where the research character of Romyana Antova and her skills for analytical and comprehensive application of the results of the research carried out are confirmed.

I also believe that **Chapter II makes the most significant contribution to achieving the objectives of the study.**

However, the **third chapter** is that part of the dissertation, without which the research would not have its completeness given the set goals and tasks. It is devoted to a critical analysis of used and possible innovative communication techniques for learning in a digital environment. and virtual methods of communication. The author believes that the term "hybrid pedagogical communication" most accurately captures the dynamics of communication developing in the new conditions of hybrid learning. Reasonable attention is paid to the use of information and communication technologies for the formation of competencies in the learning process and in the specifics of STE(A)M education through information and communication technologies – transition from STEM to STEAM education, supported by examples from the object of research PG in design "Elisaveta Vazova". Emphasis is also placed on the undoubtedly promising integration of artificial intelligence into STEAM education in vocational high schools. An answer is sought from a theoretical point of view how AI affects education and communication in STEAM and whether it is possible to increase communication efficiency when integrating artificial intelligence into STE(A)M education.

The conclusion summarizes the achieved scientific and applied results in the dissertation. The results of the study **confirm the author's second hypothesis** that the process of digitalization of education changes the methods and means of teaching and communication between teachers and students, and **deny the first hypothesis**, which suggests that standard teaching methods and tools can still be applied effectively in a digital learning environment.

3. Evaluation of scientific and applied scientific contributions

A careful reading of the dissertation and the related publications show the doctoral student's emphasized interest in the researched topic and respectively her dedication to research issues in a wide scope. This undoubtedly stems from her current professional pursuits, but also, in my opinion, from her dedication to pursue the goals of research to the point of precision.

I accept and support the main scientific and scientific-applied contributions (5 in number), identified in the dissertation and formulated in the abstract, which are reduced to:

1. *Contribution to the existing scientific theory of communications* - a new definition of communication is derived and a systematization of the types of communications in the PG is carried out; Based on an analysis of the interaction between organizational culture, emotional intelligence and the effectiveness of the communication process, a common communication scheme and communication directions for vocational high schools have been introduced, as well as new terms - creative pedagogical communication and hybrid pedagogical communication, digital hygiene.

2. *Contribution to empirical research* – new trends, challenges and opportunities for the participants in the communication process in the Parliamentary Group in the context of digitalization are revealed.

3. *Practical significance of the dissertation* – specific recommendations for improving the communication policies in the Vocational School and their effectiveness are proposed; methodologies for effective pedagogical communication in a digital environment are proposed, which can be applied by teachers in the theoretical and practical training of students.

4. *Contribution to the educational system* – the conducted research provides useful and very significant information about the quality of communication policies and processes that take place in vocational high schools, as part of the entire educational system, in the context of digitalization.

5. *Contribution to society* – the application of the results of the dissertation research creates a better supportive and effective school environment, leads to an increase in digital literacy among students and teachers, as well as the whole society, and this will lead to higher competitiveness in the European and international labor market of Bulgarian citizens.

These results and contributions are a personal work of the PhD student and faithfully reflect the results achieved, creating a prerequisite for the continuation and deepening of the scientific research, which I wish and recommend to Romyana Antova.

I highly appreciate the individual and elegant approach of the PhD student to every detail of the research. There is a desire for research in depth.

4. Evaluation of dissertation publications

The main results of the research on the topic of the dissertation are published in 4 publications, one of which is an authored monography. Two of the publications are authored, one of which is in English, one publication is co-authored. They were published in the period 2021-2024. 4 citations of the publications are also introduced.

5. Evaluation of the abstract

The abstract is developed in accordance with the requirements, the content of the dissertation and the achieved main scientific and applied results are reflected in a volume of 38 pages. The reference for contributions correctly reflects the results achieved by the author. It contains a list of the author's publications on the topic of the dissertation and notable citations on these publications.

6. Critical remarks, recommendations and questions

I would like to greet the doctoral student and her supervisor for the valuable work. During the internal discussion, I had the opportunity to present my critical remarks and recommendations to Romyana Antova, which she took into account.

I would like to address the following question to the doctoral student Romyana Antova - Based on the in-depth study of the effectiveness of communication in different environments, how can you define the concept of "effectiveness" of communication.

6. Conclusion

The presented dissertation is an in-depth study of current practical problems. It shows that the doctoral student Romyana Antova has theoretical knowledge in the field of the study and has the ability to conduct independent research. The achieved contributions with a scientific and applied nature are categorically proven in the dissertation.

The dissertation meets the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its implementation, as well as the approved internal rules and norms in IBS. This complements my opinion to propose to the distinguished members of the Scientific Jury to award Romyana Lyubomirova Antova the educational and scientific degree "**DOCTOR**" in the professional field: 3.7 "Administration and Management", scientific specialty "Administration and Management (Business Administration) ".

13.02.2025 г.
Sofia

Signature:.....
(Assoc. Prof. Stela Baltova, PhD)