

REVIEW

From: *Prof. DSc. (econ) Nikolay Hristov Sterev;*
Industrial Business Department, UNWE-Sofia;
scientific specialty: 05.02.18 Economics and Management (Industry), 3.8 Organization and Management of Production (Industry)

Subject: dissertation for the award of the educational and scientific degree "Doctor" in the professional field: **3.7 "Administration and Management "**, scientific specialty (doctoral program) **"Administration and Management (Business Administration)"**

Reason for submitting the opinion: participation in the scientific jury for the defence of the dissertation work according to Order No. 02/07.01.2025 of the Rector of the International Business School - Botevgrad.

Author of the dissertation: *Rumyana Lyubomirova Antova*
International Business School

Topic of the dissertation: *COMMUNICATION POLICY AND EDUCATION IN A DIGITAL ENVIRONMENT (FOLLOWING THE EXAMPLE OF VOCATIONAL HIGH SCHOOLS)*

1. Candidate information

The doctoral student: **Rumyana Lyubomirova Antova** , studied in the doctoral program **"Administration and Management (Business Administration)"** at the International Business School in the period: 2022-2025. Currently, the doctoral student has a Master's degree in Economics (major: **Project Management**) from the International Business School /2021/ as well as a Bachelor's degree in Management and Administration: (major: **Business Administration** /2019/.

Professionally, she started as a worker - specialist/instructor in a knitting workshop - assisting the teacher in conducting educational and production practice /1987/, and since 1988 she has been a Senior Teacher of Theoretical Professional Training at the "Elisaveta Vazova" Vocational High School of Design. She also held the position of technical organizer at the same vocational school.

In his teaching and scientific career, he has participated in a number of complementary and accompanying trainings to enhance his professional and personal qualifications.

2. Relevance of the problem

Undoubtedly, the topic of the dissertation can be defined as relevant in the modern conditions of the "emergence" of Industry 5.0 and expanding digitalization in all social and

public areas (in all possible dimensions and aspects). Moreover, the need to use the right digital marketing communication solutions is not to be underestimated at all, especially when it comes to the sphere of public education, in this particular case: vocational training and education. It is against this background that the assessment and selection of "successful" digital communication tools can be the cornerstone that distinguishes quality from poor-quality vocational education.

According to the author's motivation presented in the introduction to the dissertation, as well as in its overall content, it can be assessed that the doctoral student **has presented and argued with appropriate author's theses** the need to develop *updated and optimized methods and tools used to manage communication during digital training in vocational schools*.

3. General characteristics of the dissertation work

The dissertation on the topic " *COMMUNICATION POLICY AND EDUCATION IN DIGITAL ENVIRONMENT (FOLLOWING THE EXAMPLE OF VOCATIONAL HIGH SCHOOLS)* ", presented by *Rumyana Lyubomirova Antova* , is structured in an introduction, 3 chapters and a conclusion. With this structure, the dissertation is 180 pages long, of which 172 pages are the main part and 8 pages are appendices, using a total of 65 literary sources, including 10 in English and 55 in Bulgarian. The dissertation is illustrated with a total of 62 figures and 1 table. An additional 3 appendices are presented in a total of 8 pages, which improve the understanding of the work done by the doctoral student.

In terms of structure and content, the dissertation presented by *Rumyana Lyubomirova Antova* is balanced, presenting:

- first, presentation of the conceptual foundations of communication and communication policy, incl. in the field of public education on the example of vocational high schools. This chapter presents and defines the main theoretical achievements of science and practice for the last nearly 100 years within the scope of the research subject. Two essential theoretical points are highlighted by the doctoral student: the role of communications for /quality/ training in vocational high schools, and communication and communication tools when using digital training in vocational education. On this basis, the main problems facing the digitalization of communication in vocational education are also presented, with the focus on the influence of various digital communication tools on the quality of training and education in vocational schools.
- Secondly , the doctoral student has presented a detailed analysis of the state of communication channels in vocational education /vertical, horizontal, diagonal/ on the example of a vocational high school. The presentation in a separate paragraph

of the methods used by the doctoral student for collecting, processing and analyzing applied data in the course of the dissertation research makes a good impression. Moreover, in this second chapter, an appropriate analysis and synthesis of the possible interrelationships in the communication tools of a vocational school in a digital environment has been carried out. Additionally, the assessment of the effectiveness and quality of digital communication channels in vocational education in relation to the European learning requirements, as well as the assessment of the students being trained, deserves high praise.

- Thirdly, based on the theoretical and applied analysis and synthesis carried out in the previous chapters, in the third chapter the author has derived and described with appropriate technical means of expression the algorithm for using various tools to improve the quality of vocational education and training in a digital environment. Moreover, the development of this algorithm is the basis for improving and increasing the effectiveness of STEM education within vocational schools, incl. and its development to STEAM education. The presented guidelines for using digital educational tools for communication within the framework of hybrid learning can also be positively assessed.

The structural integrity and logical connection of the individual structural elements of the dissertation are well presented and protected by a clear and understandable conceptual framework. Moreover, the overall concept on which the dissertation research is built can be highly evaluated. The grounds for the high evaluation are:

- The object and subject are correctly defined;
- The main goal and objectives are precise, clear and logically linked to the leading research thesis;
- The defined doctoral research thesis and three research hypotheses of the doctoral student are accurate and can be verified through the selected and presented methodological tools.

4. Evaluation of the obtained scientific and applied scientific results

The main results that stand out when reviewing the dissertation can be summarized as follows:

- The peculiarities of communication and the communication process in vocational high schools are analyzed. The possibilities for the influence of communication on the internal organization are presented, using two models successfully: the model

of Geert Hofstede and the model of the three levels of culture according to Edgar Schein.

- Two main models for conducting digital learning have been identified: synchronous and asynchronous, and for each of them, arguments are presented regarding the challenges of digital communication in vocational high schools for each of them.
- A research model has been systematized to identify the opportunities, effects and challenges of digital communication in vocational high schools. For this purpose, 2 questionnaires and 1 interview questionnaire with stakeholders in digital communications in vocational high schools have been developed and applied. On this basis, the specifics of digital learning in vocational schools have also been identified.
- Guidelines for the use of information and communication technologies for the formation of competencies in the learning process have been developed and presented by the doctoral student.
- Based on an applied analysis, the critical elements, as well as the means for their management, have been assessed when using hybrid learning as an alternative to traditional learning in vocational high schools.

The specified theoretical and practical results are available and clearly highlighted both in the content of the dissertation submitted for review, and in the additional materials submitted: abstract, articles and reports. They are the personal work of the author and are the basis for deriving the scientific and applied scientific contributions achieved by the doctoral student.

5. Evaluation of scientific and applied scientific contributions

The content of the dissertation allows for a high assessment of the doctoral student's competence in terms of the theory, methodology, and applied aspects of the chosen topic.

The materials submitted for review: dissertation, abstract and publications on the topic of the work fully confirm the scientific and applied scientific contributions contained in the dissertation.

In terms of scientific contributions, there is confirmation of:

- Author's formulations covering the main characteristics of communication, including the systematization of the types of communication in professional education, have been systematized. On this basis, the types of interrelationships in the modern digital

communication environment between organizational culture, emotional intelligence and the effectiveness of the communication process have been derived and defined.

- The author proposes an innovative model for a general communication scheme and communication directions for vocational high schools. In addition, methodological guidelines for improving the quality of vocational education and training based on the use of appropriate communication policies and processes that take place in vocational high schools in Bulgaria are systematized.

Regarding applied contributions, there is confirmation of:

- The author's model for assessing the impact of digitalization on communication processes and their effectiveness in vocational high schools has been tested in practice and has revealed new trends, challenges and opportunities for all stakeholders in the communication process in vocational high schools in the context of digitalization of communication in the educational process.
- Specific recommendations for improving communication policies in vocational high schools and increasing their effectiveness have been systematized. In this direction, specific methodologies for implementing effective pedagogical communication in a digital environment have also been proposed, to be applied by teachers in the theoretical and practical training of students from vocational high schools in Bulgaria.
- Guidelines have also been developed for creating a supportive and effective school environment in vocational education with the aim of using digitalization in vocational education to achieve higher competitiveness on the European and international labor market of Bulgarian citizens educated in vocational schools in a hybrid environment.

The above contributions are of high importance for theory and practice, and they could be attributed to the following two groups:

- enrichment, concretization and refinement of existing scientific and applied knowledge on the subject of the dissertation research;
- application of existing methods to solve a specific problem for a specific object with formulated conclusions and recommendations for practice.

6. Evaluation of dissertation publications

The list of publications on the dissertation includes **4 publications** of which: 1 monograph, 1 article /in English/ in an international journal and 2 reports in proceedings of international conferences. 4 citations of the works on the dissertation are also presented.

The presented publications reflect essential parts of the dissertation work and show that the doctoral student's main scientific and applied scientific contributions have received public recognition.

An abstract is attached to the dissertation. The abstract is 38 pages long and is structured in 5 parts: General characteristics of the thesis; Structure of the thesis; Brief overview of the content of the thesis; Contributions and significance of the thesis; and List of publications and citations on the thesis.

My assessment of the abstract is high as I believe that it correctly systematizes the main theses, conclusions and results presented in the dissertation. The structure and content of the abstract are in accordance with the legal and regulatory requirements.

7. Critical notes, recommendations and questions

Regardless of my overall positive opinion and high assessment of the achievements in the dissertation, as well as the fact that no significant gaps or inaccuracies are found in the dissertation, the following question may be raised for reflection in the future activities of the doctoral student:

- To what extent can artificial intelligence be included in terms of using digital communications in vocational high schools in a digital environment?

8. Conclusion

The proposed dissertation work by *Rumyana Lyubomirova Antova* on the topic "*COMMUNICATION POLICY AND EDUCATION IN A DIGITAL ENVIRONMENT (FOLLOWING THE EXAMPLE OF VOCATIONAL HIGH SCHOOLS)*" fully meets the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria (ADSRB) and the Regulations for its implementation.

My overall assessment is that the dissertation represents an independently completed author's research, in which the research tasks have been successfully completed, and the main goal has been achieved. Moreover, the main theoretical and applied results of the dissertation, as well as the highlighted real scientific and scientific-applied contributions in it, allow for a high overall assessment of the dissertation.

Considering the above-listed characteristics of the dissertation work, as well as the contributions mentioned therein, I recommend with full conviction to the esteemed members of the Scientific Jury to award *Rumyana Lyubomirova Antova* the educational and scientific degree "**DOCTOR**" in the professional field: 3.7 "**Administration and Management**",

scientific specialty (doctoral program) "**Administration and Management (Business Administration)**".

08 February 2025
Sofia

Reviewer:
/Prof. Nikolay Sterev/