

# Educational Enterprise: a challenge for the university ecosystem in Bulgaria (an innovative approach for transferring knowledge in entrepreneurship and management to professionalism in practice)

G. Kiril Radev<sup>1</sup>[0009-0001-2228-461X], Mariya Al. Ivanova<sup>[0000-0002-9387-9178]</sup> and Teodora V. Rizova<sup>[0000-0002-1602-1258]</sup>, New Bulgarian University, Dept. of Administration and management, 1618 Sofia, Bulgaria 21 Montevideo Str., Bulgaria

**Keywords:** interdisciplinary approach to learning, project-based learning, learning by doing, higher education in management and entrepreneurship

## INTRODUCTION

Management of economic and public activities in the 21st century is to be based on paradigms, methods and approaches in collaboration with the goals and tools of Industry 4.0. and Industry 5.0. In view of the above, the European Commission [1] and the Ministry of Education and Science of the Republic of Bulgaria have developed recommendations and normative documents to carry out a planned transition to learning through practice, on the basis of which in the entrepreneurship and management educational process there had to be developed and introduced specialised theoretical-practical courses to study and apply methods and approaches optimally, responding to the essence of the elements of business intelligence systems, their applicability and expected results of their application. In 2011, New Bulgarian University (NBU) established the first Educational Training Enterprise (ETE) practical and research unit within the framework of higher education in management and entrepreneurship in the Republic of Bulgaria. In its essence, ETE is project-based training and an innovative interdisciplinary form of teaching in the field of higher education in the Republic of Bulgaria. The object of the innovative form of teaching is all students trained in entrepreneurship and management in the relevant specialties offered by NBU. The subject of the innovative form of teaching encompasses educational and training enterprises operating in a virtual environment in the form of a didactic model, enabling the achievement of an optimal symbiosis between theoretical training and practical knowledge, based on the learning-by-doing method. The main goal of the innovative form of teaching is to build a close link between the entrepreneurship and management scientific theories and the practical aspects and possible applications in a virtual environment that simulates optimally and appropriately the real business environment on a national and international scale.

Tasks of the innovative form of teaching: 1. Increasing students' motivation to acquire course materials; 2. Acquiring practical skills to set up and managing a new business, developing skills in critical and systematic thinking, decision-making and teamwork; 3. Building moral and ethical values in students in their capacity as future managers of economic entities; 4. Developing habits and mastering tools for fair competition; 5. Increasing the self-esteem of NBU students by creating conditions for their participation in international forums within the Practice Enterprise Network Worldwide (PEN Worldwide); 6. Integrating the courses studied at NBU and creating opportunities for students to participate in research projects of national and international significance.

Cooperation: In order to achieve optimal results regarding innovation and science-application collaboration, the training is conducted with the assistance of the Educational and Practice Enterprise Centre (EPEC) at the Ministry of Education and Science (MES) of the Republic of Bulgaria and PEN Worldwide.

## METHODOLOGY

In its essence, an educational enterprise is a virtual business organisation with a specific subject of activity. The scope of activities performed by the students is in collaboration with the programme scheme in entrepreneurship and management as of the relevant cohort. The study period is three consecutive semesters (6th, 7th and 8th). In the sixth semester, students develop a business plan and present it to professors, business mentors, representatives of the university management and EPEC representatives at the end of the semester. During the seventh and eighth semesters, registration/re-registration of the educational enterprise is carried out, developing its structure and legal basis. Students perform activities comparable to those in an actual business organisation. They conduct commercial negotiations, conclude deals and transfer payments to merchants, suppliers and customers as well as salaries to their employees via BUCTBANK educational bank. Within EPEC, the framework, and PEN Worldwide, the world network, each educational enterprise carries out actual commercial and contractual activities in accordance with current national and international norms and legislation. The maximum number of students in each educational enterprise is up to 16. On a rotational basis, each of the students performs the main

---

<sup>1</sup> kgradev@nbu.bg, +359885780480

management functions in administrative units. At the moment, there are four virtual educational enterprises certified by EPEC and PEN Worldwide with vertically complementary subjects of activity (manufacturing, accounting and finance, transport and tourism) operating in NBU. In the context of the new realities in their practical work in the educational enterprises, students use an ERP system and professional accounting software. An office, an equipped computer room with 30 computer configurations, a secure Internet connection and visualisation technical means are provided for the training, which enables team work (face-to-face at NBU and online) and an optimal simulation of a real-life business environment. In order to achieve optimum performance, the ERP system has modules with integrated professional software used at a strategic, tactical and operational level in the business. The training is carried out by specially certified by EPEC university lecturers with extensive and long-term scientific and practical experience in the management of business structures.

A research methodology has been developed and applied, including fundamental and applied methods, including the following: Fundamental methods: Conceptual approach, Descriptive research design, Case study, Causal research design, Diagnostic research design, Sequential research design, Field research design, Systematic review, Survey. To develop research skills in students, the following methods are also applied: Research skills for your resume and cover letter, Research skills for the job interview. Applied methods: Technological, Scientific: Action Research, Causal research, Classification research, Comparative research, Cross-sectional research, Deductive research, Exploratory research, Flexible research, Inductive research, Mixed research, Policy research, Qualitative research. A time-proven methodology for collecting and archiving data from the educational process has been developed. Multifactorial annual and periodic analyzes of the collected data are performed. The results and the degree of achievement of the tasks of the innovative form of training are reported. After that, a decision is made which fundamental and applied methods will be used in the learning process.

## RESULTS AND CONCLUSIONS

On the basis of the results obtained from the study of the principle of the Deming Cycle, annual changes have been carried out to the academic programmes and an update of the content of the lecture courses. The level of preparedness of the students has been significantly increased, as a result of which NBU has been recognised as a leading innovative institution in higher education in entrepreneurship and management in the Republic of Bulgaria. The learning process is organized within the autumn and spring semesters. The benefits of practical training in entrepreneurship and management can also be judged by the dynamics of the number of students, as well as their success rate. For the period 2012 - 2024, a total of 3936 students were trained. Conditions have been created for the participation of educational enterprises and students in the international events of EPEC and PEN Worldwide. Within the eighth semester, annually since the launch of the project, three educational enterprises participate in Young Entrepreneur international fair of educational enterprises, organised by the EPEC and PEN Worldwide. Within these forums, in a competitive environment, students demonstrate knowledge and skills for concluding business deals, conducting negotiations, building a suitable business environment, managing finances, presenting, etc. For high results achieved in practical training until 2023, more than 250 students were issued PEN Worldwide certificates, acknowledging high-level knowledge and skills mastered in entrepreneurship and management. Management and entrepreneurship education has to continuously adapt to the current characteristics of the digital business environment. Practical interpretation of the theoretical material should be enriched with digital tools used in real-life business. It is recommended that the number of specialised course hours in bachelor's degree be 50-70% of the total number, while at master's - 50-50%. The training should be organised in an interdisciplinary manner, thus allowing students enrolled in specialties relevant to business activities, like law, national and corporate security, etc., to participate in the project, i.e. educational enterprises.

For the purposes of Management 5.0, the teaching approach and policy should provide up-to-date professional knowledge and education in the basic values of the digital business society [2]. Digital transformation cannot be understood out of context. On the one hand, the evolution of society, scientific and technological progress, national characteristics and international communities and unions create new areas of human knowledge and imply a reassessment of the importance of education. But on the other hand, the good intentions of universities are often blocked by the constraints imposed by the cultural, social, civic, political and economic factors shaping the context. In online learning, the interaction between the trainer and the learners, as well as between the learners themselves, is of primary importance, which puts them in an active position. Delegating interactions and decentralization increase opportunities for cocreation and innovation in online learning. The implementation of various activities in the process of group work leads to the transformation of the learner into a partner of the teacher and increases his motivation to learn.

## REFERENCES

1. Erupean Commission Homepage, <https://education.ec.europa.eu/focus-topics/digital-education/action-plan>, last accessed 2024/08/10.
2. Radev, K.: Quality management. New Bulgarian University, Sofia (2016)