CREATING AN INNOVATIVE LEARNING ENVIRONMENT AS A DECISIVE FACTOR OF THE QUALITY OF VOCATIONAL EDUCATION

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ABSTRACT. The main object of the research was to elucidate the difficulties related to the creation of the innovative learning environment as an indispensable component of the innovative pedagogy. In order to achieve the proposed objective, there was analyzed the existing innovative learning environment in higher education in the Republic of Moldova in terms of its four core elements: learners; educators; content; resources. The practical investigation was carried out in two universities: Moldova State University and the State Agrarian University of Moldova. As a result of the research, the difficulties related to the creation of an appropriate innovative learning environment were identified and the directions to remedy the identified problems were proposed. The research methodology included: analysis, synthesis, generalization, observation, interviewing, opinion survey, formulation of reasoning and conclusions. The investigation was carried out within the project: "Support of teaching innovation, Research development and Inter-university cooperation of SAUM and TSU (Moldova)" funded by the Ministry of Foreign Affairs of the Czech Republic, Czech Republic Development Cooperation, realized by the Czech University of Life Sciences Prague (grant decision number 7/2021/7).

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Innovation and knowledge transfer are indispensable components of our current society, being required, first of all, by the extremely dynamic environment that causes the rethinking of economic and social systems and structures. Life today takes place in a world based on competition and efficiency, the strength of which lies in the knowledge. The significance of the mentioned subject is also argued by the concerns of the European Union with the creation of a knowledge-based society, a task that it is impossible to achieve without an innovative approach to education. Thus, 2009 was designated by the Council of the European Union as the European Year of Creativity and Innovation [6], starting from the premise that Europe must strengthen its capacity for creativity and innovation for social and economic reasons. That initiative aimed **"**to promote, through lifelong learning, creativity and innovation as key skills for all. The main challenge was to create an environment that is conducive to all forms of creativity and innovation, whether artistic, cultural, social or technological, and to promote the practical use of knowledge and ideas" [1].

While examining the specific objectives of the European Year of Creativity and Innovation, there can be identified some requirements that are directly related to the quality of vocational education, namely:

- providing favorable environment for innovation as well as encouraging creativity and innovation;
- demonstrating the importance of creativity, innovation and entrepreneurship, especially with regard to economic growth and employment;
- promoting the acquisition of essential skills in social and occupational context etc. [1].

Although we are already more than 12 years away from the mentioned event, the issue of innovative approach to education still remains extremely important. Pandemic conditions created additional problems, making the process of communicating with students more difficult. Thus, identifying directions to streamline communication with students and, in this way, to increase the potential of the teaching process to develop creative skills, is a priority today. In this context, innovative pedagogical approaches become an indispensable tool for the quality of education.

The term “innovation” comes from the Latin word “inovatis”, which in translation would mean renewal, novelty, change. Therefore, in its essence, innovation is something new, unprecedented.

According to The OECD Handbook for innovative learning environments, innovation represents fresh ways of meeting outstanding challenges in a spirit of openness to disciplined experimentation [3].

Innovative pedagogy in its turn is defined by IGI Global, a leading international academic publisher, as the study of pioneering ways of teaching along with an exploration of how the process of teaching is impacted by those innovations [2].

With reference to the innovative environment, we find that it is defined as “organized learning for given groups of learners around a single pedagogical core and shared learning leadership” [3].

Regarding the content of the learning environment, there have been identified the following four main elements: learners; educators; content; resources. In order to reconsider the existing learning environment and to transform it into an innovative one, the rethinking of these core elements is needed. So, according to OECD Handbook [3], in order to create an innovative learning environments:

- there must be found and applied innovative ways for bringing learners together;
- different experts must be involved in teaching process;
- the content needs to be adapted to the requirements of the 21st century competencies and, respectively, include social learning; the interdisciplinary connection is essential; emphasizing specific knowledge domains such as language and sustainability is also needed;
- learning resources and learning spaces must also be diversified, with the special focus on the digital resources.

In order to achieve the research objectives, the evaluation of the innovative environment in two researched universities (Moldova State University and the State Agrarian University of Moldova) was performed by using the following methods: observation; interviewing of 15 teachers from each university; processing the results of students’ satisfaction surveys (100 from each university); survey of 126 students, including 81 students of the Moldova State University and 45 students of the State Agrarian University of Moldova. Each research method used provided some useful information for achieving the research objectives. Thus, by observing the teaching-learning process, it was possible to formulate reasoning related to all the elements examined: learners, educators, content, resources. The processing of the results of the questionnaires applied by the quality management bodies in both universities provided the necessary information on the degree of students' satisfaction with the quality of the learning process, as well as their visions on the directions for its improvement. By surveying the students, their opinions on the roles played in the learning process were identified. The teachers' interview allowed to evaluate their own position regarding the expected and the real role played by the students in the learning process.

Initially, we will refer to the three of the four elements of the innovation environment: educators, content and resources. The recent efforts made in order to ensure the necessary human, material and informational resources needed for an adequate quality of the educational process are well known. The major investments made have resulted in a suitable material endowment, as well as in the development of teachers' skills, especially in applying IT tools. The results of the teachers` interview, as well as the level of students’ satisfaction identified on the basis of the questionnaires allow to make certain assessments, as shown in Table 1.

Table 1. The general findings related to educators, content and resources as indispensable elements of the innovative learning environment

The element of the innovative environment	The overall appreciation	The justification of the appreciation	The sources of information
Educators	Teachers have an adequate level of competences in the related fields, as well as good skills in applying modern educational technologies, including the application of IT tools.	The average grade given by students to staff is within the limits of "good" and "very good".	Students' satisfaction assessment questionnaires; teachers` statements during the interview.
		All the teachers involved in the study programs use various IT tools, carrying out a large part of the teaching activities on the educational platforms.	Students' satisfaction assessment questionnaires; observation on the way of carrying out the didactic activities.
Content	The study content corresponds to the requirements of the labor market.	A continuous updating of the study content by connecting to the trends in the related fields and to the needs of the labor market is carried out.	Students' satisfaction assessment questionnaires; curricula; employer's satisfaction with programs.
Resources	Learning resources are varied, constantly updated and accessible to students.	Study programs are adequately resourced through the joint efforts of universities, teachers and libraries.	Students' satisfaction assessment questionnaires; accessibility of learning resources on the MOODLE platform; continuous completion of the repository (in the case of MSU); the existence of multimedia equipment, as well as other material resources necessary for the teaching process. *Note: within SAUM, some students mentioned the need to update the resources needed for practical lessons.*

Source: elaborated by the author.

Making a generalization of the information exposed in Table 1, we deduce that the general level of assurance of the three components of the innovative learning environment examined: educators, content and resources, can be considered as adequate. However, this reasoning does not mean that continuous efforts should not be made to permanently connect the respective components to the needs of the beneficiaries, given the fact that some vulnerable moments related to the material resources have been found. At the same time, increased attention requires the fourth, but the most important component of the innovative learning environment - learners. According to the OECD Handbook for innovative learning environments, the provision of a central role to the learner is the key feature of the innovative pedagogy [3]. Focusing on the student, in turn, is impossible without the latter assuming and exercising an active role in the learning process. And here we find the existence of substantial differences between the role expected by the teachers and that actually exercised by the students. Thus, the interviewed teachers unanimously supported the idea that the success of the learning process can be ensured only through the active students` participation, by transforming learning into a collaborative process.

The students, in turn, evaluate their actually exercised roles more modestly, as noted in Table 2.

Table 2. The self-assessment of the roles played by students in the learning process

The roles` content	% of respondents who selected that option
Information assimilation and reproduction.	5
Information assimilation and reproduction; searching for and systematizing new information.	34
Information assimilation and reproduction; searching for and systematizing new information; the exchange of opinions with colleagues during different didactic and extra didactic activities.	29
Information assimilation and reproduction; searching for and systematizing new information; the exchange of opinions with colleagues during different didactic and extra didactic activities; the accumulation of new knowledge through collective learning, as a result of the synergy of opinions.	23
Information assimilation and reproduction; searching for and systematizing new information; the exchange of opinions with colleagues during different didactic and extra didactic activities; the accumulation of new knowledge through collective learning, as a result of the synergy of opinions; expanding the horizon of knowledge by participating in innovation and research activities carried out in collaboration with teachers and business representatives; obtaining common innovative products.	9

Source: elaborated by the author.

Based on Table 2, we find out that each subsequent role involves an additional task, which brings the learning activity closer to an appropriate innovative environment. At the same time, the share of people exercising these responsibilities decreases as they move towards the innovative environment, this fact being reflected in Figure 1.

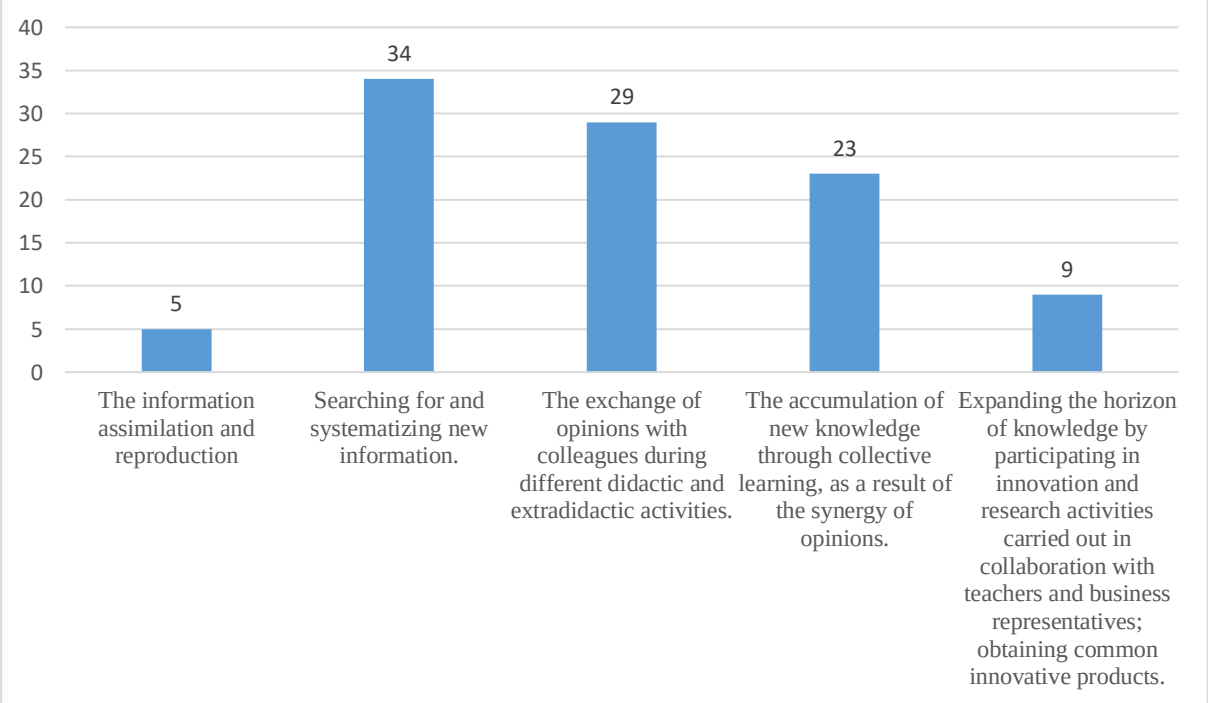


Figure 1. The share of respondents playing different roles in the learning process
Source: elaborated by the author.

Thus, we deduce the existence of important reserves needed to be mobilized in order to foster the learning process to move to a higher level - the innovative learning environment. Creating an innovative learning environment, in turn, involves adapting teaching tools for the more active involvement of the students in this process, motivating them to assume the commitment of active participants and even partners in the learning process. The last reasoning is supported by the existence of good practices of partnership with students not only in research activities [4], but also in the development of teaching resources [5], in the organization of the events, etc.

At the same time, returning to the first three analyzed components of the innovative learning environment, we deduce the need for their continuous updating, they being a necessary framework for remedying the problems related to the latter, i.e. learners. The conditioning links that exist between the four core elements analyzed and the quality of the vocational education is represented schematically in Figure 2.

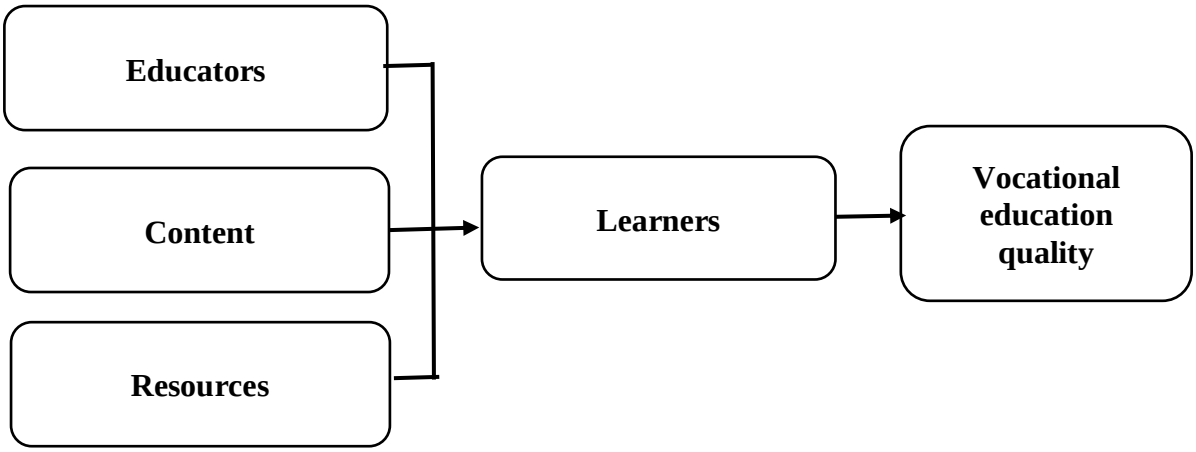


Figure 3. The conditioning relations between the core elements of the innovative learning environment and the quality of the vocational education
Source: elaborated by the author.

By generalizing the above mentioned, we find out that only by mobilizing all components of the innovative learning environment, the process of vocational education can claim the performance required by the labor market. Thus, the central role of the learners in the innovative learning environment being recognized, the optimal mobilization of the other three elements is strictly necessary, and the expected final effects can be obtained as a result of the synergy of all four components.

CONCLUSIONS

The creation of an innovative learning environment is today a significant objective of the vocational education process in the context of the concern for connecting the quality of the educational offer to the flexible requirements of the labor market.

The evaluation of the quality of the innovative learning environment based on two researched universities: MSU and SAUM allow to make a positive initial assessment for three of the four components: educators, content and resources. The analysis of the fourth, but the most important component - learners, highlighted the problem of their insufficient involvement in innovative activities. Based on the latest reasoning, we deduce the need for broader efforts aimed at stimulating students for activities specific to an innovative environment. Therefore, there exists the obvious need to permanently connect the teaching-learning tools, the study content and the learning resources to the requirements of an

innovative learning environment. So, the expected final effects can be obtained as a result of the synergy of all four components.

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