CHANGING THE HIGHER EDUCATION PARADIGM IN MOLDOVA: THE STEADY NECESSITY IN TODAY'S WORLD

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Abstract: The Problem-Based Learning (PBL) is a conceptually new model of higher education that involves student-centered learning and actively engages students in problem solving. PBL speaks to the current world's challenges and developments and places a student in the center of learning as opposed to a teacher in the traditional higher education. Today, the young people have an access to a large bulk of information and not only can learn but also gain experience by solving different problems they encounter. This article describes the background for changing higher education paradigm in the modern world, the PBL's principles and advantages for the current education system and in the future, and the possible challenges arising from the shift from the traditional learning to PBL. In addition, the article discusses the Kurt Lewin's force field theory regarding the shift to PBL in the Moldovan universities as well as the factors that promote the changing process. In conclusion, the article suggests that the changes in the higher education paradigm would help the Moldovan universities to overcome the existing difficulties, move to the new stage of their development, and become more competitive in the international context.

Keywords: higher education, traditional model, PBL, force field, changes[1]

THE BACKGROUND FOR CHANGING THE HIGHER EDUCATION PARADIGM IN TODAY'S WORLD

The rapid development of the modern world, globalization, and the warp-speed information dissemination based on the flourishing of internet technologies as well as an increased importance of creative economy inevitably require changes in education paradigm. Today, the overarching changes cover all aspects of companies or organizations: their operating principles, their needs and the needs of clients. As a result, the education system that for a long time has been a relatively conservative (with regard to traditions, teaching methods, and approaches) also undergoes changes. Any changes in a society affect the education system since the latter provides the basis for the society's development and creates a foundation for shaping the views, attitudes, and the mind-set, and ultimately, for the well- being of the whole society.

Innovation in higher education should follow the current realities and focus on a student rather than a teacher in order to develop the potential of young people. This principle is based on the understanding that today's student is a mature person who is free-spirited and creative; a person who has his own vision and think on his own even if that differs from those around, including a teacher.

The other aspect of the modern higher education concerns the universal availability of knowledge that is related to the general access to internet. Following this, the earlier obstacles

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in having relevant information have been naturally removed. A key role in this process belongs to an advanced opportunity for the high-speeded and quality communication between a teacher and a student, and among the group of students.

One of the essential factors for bringing the changes in higher education paradigm has to do with the increased competency requirements of today's employers. Often, those requirements concern the set of qualities that are impossible or very difficult to develop for a student who went through the traditional education. In particular, the lack of necessary practical skills and abilities for self-navigation in business-media where a student is coming right after the university significantly reduces his or her chances for getting a job. In other words, the changes in higher education paradigm enhance the students' competitiveness and employability.

As a result, the modern higher education aims at developing a student's ability to learn, to navigate the diverse information, and to adapt to real business problems rather than simply to know the existing theories and concepts. Therefore, a student of today has transformed from a listener into a researcher. Given the fact that learning is an ongoing process and is not limited only to the higher education, the young people should develop the skills to work independently, navigate the large bulk of information and find solutions to the existing problems.

All of these and other factors contribute to the revision of the traditional approach to the higher education.

MEETING THE CURRENT NEEDS OF THE HIGHER EDUCATION: THE PBL'S ADVANTAGES AND PRINCIPLES

PBL's advantages

There is a large variety of today's innovate teaching methods that include the distance learning, differential instruction, module-based instruction, project-based instruction and so on. The PBL becomes more popular and, as we believe, meets all of the-above-mentioned needs for creating a prototype of a new education model. The PBL is widely used by many universities around the world including the USA, Canada, Denmark, Great Britain, Australia, Germany, Sweden, and other.

This approach allows a student to "feel" the issues, which he is supposed to know, through the practical research and the search of the ways for solving a problem. As a result, a closer look into a problem helps to identify the guiding principles for research and to study the required literature and applicable information. It also frames the communication with the companies' or enterprises' staff who are more experienced in their field, helps to articulate specific questions that are related to a given research, and casts a light on the company performance in a real business-media. While studying a problem, a student uses the knowledge he gained from the different courses and fields of studies.

Following such an interdisciplinary analysis, students develop a systemic understanding of information. Also, they start to see the linkages between the gained knowledge as well as find the gaps in their own knowledge framework that require more readings from the field literature and discussions with a teacher. Thus, it encourages students to learn the subject matter they have missed or partially covered.

The PBL's definition could be summarized by the quote given by Howard Barrows

from McMaster University in Canada, who defines the PBL as "a learning method based on the principle of using problems as a starting point for the acquisition and integration of new knowledge" (Barrows and Tamblyn, 1980).

Today, a teacher's role changes significantly. Since everything in this new approach is about a student's independence and personal focus, a teacher becomes a mentor for a student, his supervisor, and adviser who provides the information as it necessary and without imposing its large amount at once if it is hard to process and keep in mind. At the same time, in PBL, the teacher is an universal expert who is fully competent not only in his own field, but also well-versed in other subjects and familiar enough with psychology in order to incentivize and encourage the students, analyze the situation and build the teams. Besides, the teacher's role is changing from the authoritative and controlling role to the supportive and consulting one and, ultimately, that improves the inter-personal relations between the teacher and the student.

Another advantage of PBL is that more often the work in a classroom is done in small teams. Being involved in a teamwork, a student learns to operate in an environment that is similar to the conditions on the ground; he performs a specific task and learns to build up not only the relations with his own group but also with future business partners.

PBL's principles

For a closer look at PBL, let us examine the principles that apply to the Danish PBL – understanding (Berthelsen et al, 1977) as well as their practice in the Moldovan universities today, and the goals of the universities for the future.

Table. *The PBL's Principles: The Current and Desirable State of the Higher Education in Moldova*

The PBL's Principle	Interpretation in the Current System	Desirable State of the System
Problem orientation	Analysis of tasks, problems or situations in which students should find "right answer" often with a given solution algorithm; in case a student faces a difficulty, a teacher explains the solution, i.e. the answer is being predetermined in advance	Students are given an open-ended problem; they are looking for the ways of tacking the issue and the right answer through an independent study, a teacher only guides and supervises the course of activities; there are a number of possible solutions, the outcome is not being predetermined in advance; there is a need for the additional knowledge during the problem solution
Interdisciplinary	Rarely used but if so, mainly during the work on a thesis; in other cases, the emphasis is made on the specific subject course included in the curriculum	Problem solution implies the use of the knowledge from the different fields, it develops the student's comprehensive knowledge framework in tackling the problem

Exemplarity	In discussing a theory, a teacher often brings examples from the real world to confirm the theory	Students not only learn the real-life situations from a teacher but also take a direct part in the situations by being personally involved in the work of enterprises or companies
Participant direction	A teacher guides explicitly by stating "the rules of the game" and taking a direct part in the students' research	A teacher plays a role of a mentor; he does not impose his own approach towards the problem solution and helps or advises in difficult situations
Group work	Is either missing or used for a short exercise, an individual-centered learning prevails to a larger degree	Used throughout the whole period of a problem solution: either during the semester or the longer period of time

Based on the data provided in the table, we can suggest that the universities in the Republic of Moldova use the traditional approach to education with, however, some elements of the interactive education. In particular, they use the team exercises, group discussion, students' presentation in front of the audience followed up by the discussions of the subject questions, hosting debates and competitions that are initiated by the teachers and students, and the organization of round tables and students' circles. At the same time, this approach significantly differs from PBL in which the understanding and learning is realized through the self-motivated attitude and the developed needs to find out the truth and solve problems.

POSSIBLE BARRIES STANDING IN THE WAY OF EDUCATIONAL CHANGES

According to the change management model (Cameron and Green, Kurt Lewin, John Kotter, Hammer and Champy, etc.), any changes meet inevitable resistance during their initiation and development stages. This is a natural tendency due to the fact that the transition to something new always involves additional costs such as time, energy, money, and efforts, and as a results, people are bound to resist. The same authors also argue that it is possible to manage changes. For example, by developing a detailed system of the reasoning for the change and incentives or the benefits of their successful implementation it is possible to align those resistant to the overall strategic direction of the organization.

In this context, the force field theory developed by Kurt Lewin is widely known. It suggests that the changes go through a number of stages: unfreezing, change or transition, and freezing, and that there are two resisting fields or factors that are driving changes (helping forces) or blocking them (hindering forces). Taking this model as a basis, we can apply the theory for the changing education paradigm in the Moldovan universities. Let us outline the force field model in the figure below:

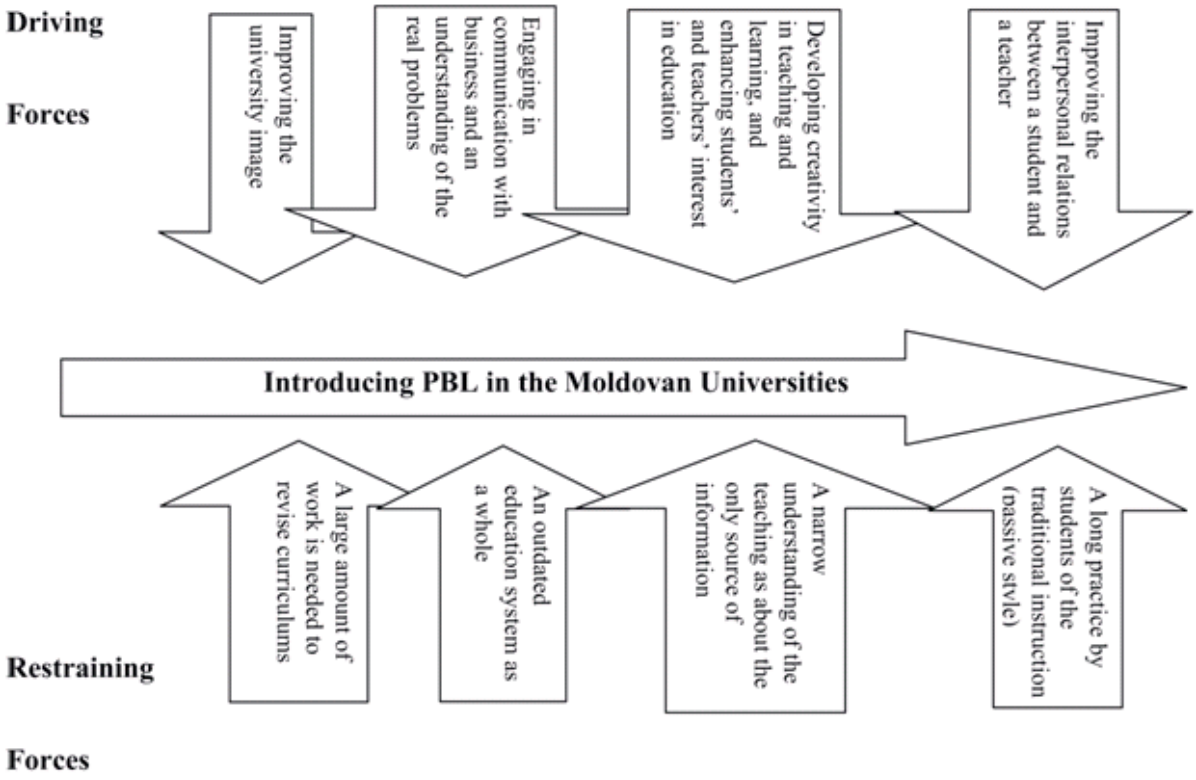

Diagram. The Force Field Model for the PBL's Introduction in the Moldovan Universities

We believe that the above diagram describes the most critical deterrents, which could be, in their turn, further elaborated. First of all, the teachers could be reluctant and resistant to implement PBL because the changes of curriculums require the additional work time and labor costs. Those changes involve the curriculums' adaptation towards existing business conditions and the search for the companies and enterprises that are willing to cooperate with the universities. Also, they include the changes of the teachers' role in the learning and instruction as well as in shifting the traditional vision.

In addition, the students could experience the difficulties in adjusting to the new education paradigm given the previous long practice of the traditional lectures and seminars that goes back to school. PBL requires the higher responsibility, personal autonomy, and independence as well as the higher level of difficulty of tasks and situations as compared to the traditional ones. At the same time, these obstacles could be overcome, to a larger extent, by an increased interest towards work, an opportunity to "feel" the real situation and to interact with the potential employers who also have a stake in instructing their future employees.

INTRODUCING PBL IN THE MOLDOVAN UNIVERSITIES

The presentation of the driving and restraining forces for the PBL's introduction in the Moldovan universities allows us to discuss the ways of fostering the driving forces and weakening the impact of the restraining forces in order to ensure the successful implementation of changes.

We believe that in order to ensure the successful implementation of this innovative approach in the Moldovan universities, first of all, it is important to explain its advantages in

detail to all stakeholders. In this context, the model of the process for leading change suggested by John Kotter (1992) and called "Kotter's 8-Step" seems the most appropriate. In particular, Kotter notes that "it is important to amplify communication of the vision [of changes] by a factor of ten from what is expected", i.e. to communicate the PBL's principles and the benefits related to their implementation everywhere and all the time. In addition, Kotter calls for "generating short-term wins" – the step that is predicated upon seeking and making visible unambiguous success as soon as possible.

To exemplify these steps, there are a number of ways to attract the considerable attention towards PBL in the Moldovan universities. They include the engagement of mass- media, the involvement of companies or enterprises to partnerships through the different organizations, the organization of tours or field trips around the companies to bring students closer to business media as well as business class closer to the national universities. Such a mutual dialog develops the students understanding of working conditions and job management.

Furthermore, to foster the development of students' creativity, teachers could come up with the interesting tasks during research. Or, they could set up a competitive environment between the students teams by organizing competitions, tests, interactive games, and specific subject research circles that would involve students from the different groups, faculties and also universities. In addition, in order to create the real conditions for those activities it is advisable to engage in them the representatives of business media.

The business class also should see many advantages of the PBL's implementation for themselves. First, during an internship at an enterprise or company, the young people present themselves and prove their skills. As a result, the companies have a chance to directly engage the most creative and pro-active students afterwards. Second, while being involved in the companies' activity, the young people bring new ideas, visions, and trends that the employees, who have worked for a long time at the same position, have not seen before. Third, by engaging the universities in the work of companies or enterprises, the latter become socially responsible and, ultimately, improve their public image.

CONCLUSION

The society's modern age requires the existence of such an education system that goes beyond the national borders and embraces the status of an international agency. Therefore, the obsolete approaches and methods make room for the new paradigms and models. Given the open access to information and substantial positive experience of the international educational institutions, the Moldovan universities have to follow the innovative approach to education that is focused on applied research. In this regard, the provides a variety of advantages that the traditional model is incapable of bringing given its limitations.

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