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EDUCATIONAL E-ENVIRONMENT OF MODERN UNIVERSITY: FOREIGN EXPERTS' PERSPECTIVE

Abstract. This article presents discussion of a round table debate «Open educational E-environment of modern university» a group of European experts shared their professional and personal insight on the issue of construction, introduction and sustainable development of open educational environments in the Information Age.

Keywords: discussion; e-environment; university; experts'; educational

The dynamics of modern society toward information and open one is naturally reflected in education that mirrors social and other actual relations in society. One of the newest forms at this stage of social development is open education that provides comprehensive and utmost implementation of new information and pedagogical technologies in teaching.

Education must cater to and fulfill the society needs. However, the forms of knowledge acquisition and update have remained unchanged.

The actual steps toward solving these problems are:

- creation of a unified educational information environment;
- the use of open learning;
- providing open access to distributed information and technological resources.

Knowledge management has become a new educational principle as well as formalization of knowledge creation, knowledge (access to knowledge) transmission (distribution) and knowledge control have become new technologies of education. Equal access to such technologies should be provided at all levels of education system. That's why within the course of a round table debate «Open educational E-environment of modern university» a group of European experts shared their professional and personal insight on the issue of construction, introduction and sustainable development of open educational environments in the Information Age. The discussion was moderated by Prof. Nataliia Morze, Doc. Hab. Of Pedagogy, Vice rector of Borys Grinchenko Kyiv University, Ukraine. The group of experts featured members and coordinators of the 7th EC Framework Program IRNet project:

- *Eugenia Smyrnova-Trybulska*, Doc. Hab. Of Pedagogy, University of Silesia, Poland,

- *Martin Drlik*, PhD, Konstantine the Philosopher University, Slovakia
- *Izabella Alvarez*, Lusiada University, Portugal

1. Nataliia Morze:

Before, the study at the University was associated with concepts of science and a learning process. Now the concept of university and learning environment are inseparable. What has changed?

Name 1 or 2 reasons of appearance of the electronic environment concept in a modern university. What other concepts in this series can arise when we speak about the university of the future?

Eugenia Smyrnova-Trybulska:

- Competent teachers and researchers
- Global and comprehensive implementation of contemporary technology
- Open, flexible, multi-vector, multi-threaded education in the e-environment,
- Increasing the level of internationalization
- Universities as centres of innovation, high-tech, globalization and application of science

Martin Drlik:

The criteria for faculty evaluation have changed. The university professor or tutor should be not only an educator but also a researcher and a productive author of scientific publications. At the same time, information technologies have become an inseparable part of the everyday life. The electronic environment of the university is a natural consequence of these changes.

Izabella Alvarez:

Internet and the web (especially Web2.0) made possible the electronic environment concept due to the standardization of the protocols of communication. However there is still a gap in literature concerning its content.

2. Nataliia Morze:

Universities as all schools have always been open not only in our country. But before the phrase Open University - or open learning environment of the university has never been used. What are the three features of the modern university?

Eugenia Smyrnova-Trybulska:

Main:

- Internationalization
- Globalization
- Open e-environment

Additional:

- Lifelong learning
- High quality of education
- Universities as centres of innovation, high-tech and internationalization of science
- Centres of science and research
- Preparing students for competitive specializations needed in the labour market

Martin Drlik:

The modern university should be a research oriented university, closely connected with the industry and entrepreneurs, and be in the position of regional authority or partner in many areas of the society.

The openness of the learning university is slightly another question. It is not possible to provide all educational resources freely available to everyone. However, there are many possibilities, how to share and broaden the knowledge to different target groups.

Izabella Alvarez:

A modern university does not mean that everything must be done electronically, keeping the students at distance. An open university or open learning environment suits the groups of students that cannot attend physically the courses.

A modern university must provide:

- face to face learning to the group of students that can attend classes and so take advantage of the social contact with their schoolmates making friends for their whole life. This type of learning should be supported by blended learning
- distance learning for those students that cannot or do not want to attend classes

3. Nataliia Morze:

Is it right not to add a word “scientific” to the concept of educational environment? Meaning to say open educational-scientific electronic environment? Is there a contradiction here? If so, name two ways to resolve it.

Eugenia Smyrnova-Trybulska:

It seems to me the category “educational and informational electronic environment” is more general and global than the category “educational-scientific electronic environment” and that it includes this environment.

Martin Drlik:

Terms scientific and educational are closely related to the university. They describe the primary goals of the university – provide high quality education and act as the research center of the region or the whole country. However, educational and scientific e-environments are usually two different environments, which are only partially interconnected. The aim of the university management should be to engage students in pursuing career in research and science. On the other hand, there is great opportunity to do educational research in the electronic educational environment.

Izabella Alvarez:

To add the word “scientific” to the concept of educational environment may induce that it learning only directed to the scientific courses and which are usually the engineering, medicine, biological courses. Educational environment should be the right designation enclosing all the different areas of study.

4. Nataliia Morze:

According to the 7-th Framework program of EU we have visited the University of Twente. It is an amazing University. But the first thing that impressed us that the educational process with lectures and seminars is absent. A key chain is: a training Project - research project, crowd sourcing project, startup. Are there examples of such universities in your country? Name them. If not, then name the reasons why this can be possible.

Eugenia Smyrnova-Trybulska:

- University of Gdansk (<http://nauka.trojmiasto.pl/Uniwersytet-Gdanski-w-gronie-TOP-10-Startup-Friendly-n86781.html>) – developed more than 700 start-ups during 10 years
- Poznan University of Economics and Business
- Wroclaw University of Economics
- University of Silesia

Reasons:

- Establishing an academic entrepreneurship incubator at the university
- Legal support for young entrepreneurs
- Support in accounting and financial terms
- Competent activities of the Career Office and good promotion
- Help and support from the academic entrepreneurship incubator and the Career Office in finding financial sources for different undertakings

- Activities and enterprise aimed at creative competence and thinking of side scientists and academic teachers of the university
- Changes in the concept of teaching and learning method
- other

Martin Drlik:

There are several successful case studies of this approach in Slovak republic described. Most cases were realised at the universities, which focus on management, economics, but also on IT or industry. I consider this approach fascinating. Its wider use is conditional on the demand and willingness to cooperate with private and non-profit sector, students' understanding of this approach, their responsibility for their future career and employability in the labour market.

Izabella Alvarez:

No, there is no such thing in Portugal in the Universities.

Universities are organised in the traditional way, although offering already e-learning facilities, for those who prefer to attend this sort of learning.

Also, universities are controlled and certified by the Ministry of Science and Technology, under strict rules.

5. Nataliia Morze:

Name two universities in your countries, which created an open learning environment of the university. What provided for making it possible: the personality of a leader-innovator-strategist, money, availability of educational policy?

Eugenia Smyrnova-Trybulska:

- Polish Open University in Warsaw
- University of Silesia
- Open University of Science and Technology in Cracow

The presence of a leader-innovator-strategist, money, availability of educational policy is the key.

Martin Drlik:

It is not usual to provide open learning environment of the university to the public. Almost all Slovak universities provide a subset of the educational resources in electronic form, mainly in the form of e-learning courses. Electronic versions of books and textbook are largely used. The level of the openness of the university is directly related to the vision and long-term strategy goals of the university management. If they are accepted, it is, of course, necessary to have a budget, engage faculty staff and define processes.

Izabella Alvarez:

Public universities: ISCTE and Universidade do Minho (there are others too).

Private universities: Universidade Católica and Universidade Autónoma (there are others).

What made this possible: the growing need to support students that cannot attend classes and the use of the internet/web technology: the group that takes the decision in the universities (in some the rector, others the administrators) understood that they should start moving towards distance learning to complement the actual learning offer and so the necessary investments were made

6. Nataliia Morze:

We know that many countries have built successful economic education policy, which takes into account the fact that society has become informational. Does such educational policy in your countries exist at the state level and at the university level? If so, then for how long?

Eugenia Smyrnova-Trybulska:

Among the most important documents we could mention:

- UNIVERSITY OF SILESIA IN KATOWICE — DEVELOPMENT STRATEGY 2012-2020 (<http://bip.us.edu.pl/sites/bip.us.edu.pl/files/strategia20130627eng.pdf>). The Strategy is intended to outline future-oriented growth trends of the University of Silesia with the aim of quick responding to the ever-emerging challenges of the new times and strengthening the University's position in Poland and abroad. The document you are presented with follows an analysis and assessment of the situation of the University, the measures it has undertaken so far and the predicted civilization growth of Poland, Europe and the world, as set forth in the documents Europe 2020 — a strategy for smart, sustainable and inclusive growth within Poland's National Reform Program. The Strategy presents challenges which have been given high priority in view of the future of the University of Silesia, and provides specific solutions to the dilemmas we will be facing.
- Law on Higher Education (http://www.bip.nauka.gov.pl/g2/oryginal/2014_03/4ee4d7fcec1a100d8ee3e690fb4cd09d.pdf)
- Education Policy (<http://pkn.pl/polityka-edukacyjna>)
- ESSENTIAL OBJECTIVES OF POLISH EDUCATION (www.rpo.gov.pl/pliki/1139860491.DOC)
- Legal aspects of the development of information society in Poland (https://www.web.gov.pl/g2/big/2009_12/60262697a02b6fe40139bbcbcc311850.pdf)
- Other

Martin Drlik:

Educational policy is defined on many levels, on the EU level and on the national level. Therefore, it is necessary to take it into account also at the university level.

Izabella Alvarez:

Yes, in Portugal there is a strong recommendation to use the “information society” in every field, both in education and also in industry. This also applies to the state level and it started more than 10 years ago.

7. Nataliia Morze:

Distance learning (blended learning now) is spoken by all except, except the “lazy men”. May “lazy men” are right? Maybe we have to wait, until distance learning will help to improve the quality of education? Who wins - who is in a hurry or who waits?

Eugenia Smyrnova-Trybulska:

It seems to me that both processes should be developing synchronously - distance learning as well as improving the quality of education. A digital revolution is really taking place and it's impossible not to take into account the change in IT-technology, devices and technology trends. Young learners don't want to learn according to old traditional methods and they are already prepared for changes in educational methods, based on e-learning support. This also confirmed the research and studies conducted within the framework of IRNet Project. More than half of students prefer distance and e-learning, more than 80% use social media for educational aims...

Martin Drlik:

As has been stressed before, distance learning implementation using e-learning requires many financial, managerial, personal and technical resources. For that reason, it is necessary to minimise a failure. From this point of view, the position of lazy men is safer. On the other hand, it is hard to implement easily e-learning solution from one university to another, because each university has different processes, people with different knowledge, expertise of experience, etc. The success of the e-learning implementation depends on the university management, and their ability to improve the quality of educational processes as a whole. E-

learning is only modern, although many times proved, tool, which can help in the quality improvement process.

8. Nataliia Morze:

Name two reasons that prevent processes of distance learning implementation?

Eugenia Smyrnova-Trybulska:

I don't know any typical important reasons, but they may reduce the pace of development. Simultaneously among challenges we could mark: a slow Internet connection and sometimes lack of competence on the part of lecturers in the field of e-learning as well as not sufficiently developed distance courses.

Martin Drlik:

Missing identification of the university management with the possible advantages of distance learning implementation (in the form of e-learning). Weak teaching staff engaging into the e-learning, insufficient motivation to use modern forms of learning and experiment.

Izabella Alvarez:

Limited technological facilities can prevent the use of certain methodologies; Online learning implies large investments with sometimes higher costs than the traditional face to face learning.

More difficulty in motivating the students and so preventing them from giving up the course

9. Nataliia Morze:

Name three reasons, why a lot of Rectors prevent processes of formation of e-environment of the university. What is the approximate percentage of rectors in your countries that support the widespread introduction of ICT in the learning process?

Eugenia Smyrnova-Trybulska:

I don't know such reasons and statistics.. Our Rector Prof. Ph.D. hab. Wiesław Banyś supports the development of e-learning at the University of Silesia and he includes e-learning in the priorities of the developmental strategy of our university...

Martin Drlik:

I do not know the exact number. E-environment formation at the university does not belong to the priorities of the high education at the national level. For that reason, its implementation is based on the preferences and strategic decisions of the university management. The university management should define rules, criteria for educational content quality evaluation, approaches to teaching staff motivating, and invests in the IT infrastructure and faculty. All these aspects contribute to the final decision of the university management about the support or damping development of e-environment of the university.

Izabella Alvarez:

As I say above, these type of decisions / investments, if proved to be useful and needed to the universities / students, then are approved by the administration or the rectors (depending on the structure of the institution management).

Concerning the introduction of ICT in the learning process it is already well spread around the country, whether in Universities or high schools.

10. Nataliia Morze:

What is your opinion about MOOC - is it good or bad for the future of the university? There're free courses (if necessary, one can obtain a certificate), and at the University we have to pay.

Eugenia Smyrnova-Trybulska:

MOOCs are very important and necessary first of all in informal education. Simultaneously, the elaborating of the MOOC is a very very hard task and needs intellectual work of a lot of teachers, authors as well as a lot of time because issuing official certificates should be paid. On the other hand, if the authors have financial support from grants or other

sources, the MOOCs course could be free of charge for students. However, a little payment could be additional motivation for students to end the course and receive the certificate.

Martin Drlik:

I consider MOOCs can improve and fill the empty place in the educational universe. I do not consider MOOCs to be a concurrency to the universities. MOOCs are free. However, the accepted certificates are also paid. They are not accepted by the recruiters at the same time. Therefore, the position of the universities is not jeopardized. Moreover, these certificates are not widely accepted. They do not replace successful completion of the study programs at the universities. On the other hand, MOOCs can improve the quality of the courses at the universities, because the students have easy access to the syllabus of the given subject at other universities and can compare it with the syllabus of the visited subject.

Izabella Alvarez:

Although the use of ICT technology was quickly proved to be very useful to the actual learning in Universities, in Portugal MOOC will take long before being considered as all the learning in Portugal is controlled and certified in terms of quality by the Ministry. According to the Portuguese culture, there will be a suspicion by industry whether MOOC courses will be duly qualified.

11. Nataliia Morze:

Now in all countries appear MOOC platforms, in our country as well. Raise your hands please, who worked with MOOS? Name one key advantage of MOOC?

Martin Drlik:

I have participated in several MOOC courses as a student. MOOCs provide an opportunity for teachers to know, how their subjects or research fields are taught at the leading universities, what topic are in the curriculum, what kind of resources and activities they use. From the teacher's point of view, MOOCs moved the teacher's role to the background, because the emphasis is on the communication in the community of learners and on the help of so-called teacher assistants.

Izabella Alvarez:

I did not work with MOOCs until now. At this moment I cannot yet see a real advantage as opposed to the classical courses.

12. Nataliia Morze:

What challenges appear to universities with a wide MOOC distribution?

Martin Drlik:

Universities should provide e-learning courses and prepare students to obtain knowledge and skills necessary for their lifelong learning. As I wrote before, I do not consider MOOC to be a direct concurrency to the universities if we talk about the third level of education (higher education). However, MOOCs can be a more popular choice for people, who would like to improve their knowledge, proficiency and skills while they are working. Another situation will occur, when the paid certified specialisations in MOOCs will be accepted by the employers.

Izabella Alvarez:

As I say above MOOC is far from being considered or used.

13. Nataliia Morze:

E-learning environment and quality education. Is e-environment hurt the quality of university education or improve it? Give two reasons for the confirmation of your opinion.

Eugenia Smyrnova-Trybulska:

I think to improve it. But several conditions should be taken into account.

Martin Drlik:

Many internal and external factors affect the quality of university education. E-environment can improve the quality if its implementation and use in the line with the vision

and intentions of the university management. The university should define clear rules, processes and responsibilities for all e-environment stakeholders. Moreover, it should train the stakeholders, explain the necessity of e-environment as well as provide control mechanisms.

Izabella Alvarez:

E-environment did in fact strongly improved the university education.

The quick distribution and access to documentation as well as a closer communication with the students, are two of the reasons.

14 Nataliia Morze:

In our university exists a certification of Electronic educational courses, namely the verification of Electronic educational courses for compliance with internal corporate quality standard. Do you need this procedure and whether it is in your universities? If not, then whether you want to launch it?

Eugenia Smyrnova-Trybulska:

Yes, our University of Silesia has a legal regulation of the implementation of distance learning as well as the introduction of e-learning courses... We have the verification of electronic educational courses conducted according to Academic E-learning Community (SEA) as well as internal corporate quality standards. There is a multi stage mode – preparing a draft version of the course and using it for supporting traditional classes, making improvements according to students' suggestions and then – using the improved distribution version for distance learning (up to 60% hours). Every year the evaluation of distance learning courses is conducted by students and distance learning experts...

Martin Drlik:

Yes, the internal process of evaluation of the e-learning courses should be known and strictly used. The e-learning board at our university defined a set of criteria, which have to be completed for certification of the e-learning course. Unfortunately, the process of their implementation is very slow. I assume, the success of this kind of evaluation of e-learning courses depends on the existence of national standards, intentions of Ministry of education, wider acceptance of e-learning in the educational system.

Izabella Alvarez:

I would need more information about these "Electronic educational courses".

We do not have such courses in our University.

15. Nataliia Morze:

Name two problems in the development of educational e-environment at the University.

Eugenia Smyrnova-Trybulska:

- Copyright
- IT competence of the academic staff

Martin Drlik:

People and insufficient external demand. People should understand the process of e-environment development and implementation. They should be motivated to take part of it. It is possible to reach this state by the money or by external demand (concurrency, national standards, and international standards).

Izabella Alvarez:

Education of all stakeholders in the use of the technological environment. The investment in development a suitable system.

16. Nataliia Morze:

Name three risks (disadvantages) in building the educational e-environment at the university.

Eugenia Smyrnova-Trybulska:

- Copyright

- other

Martin Drlik:

Return of investment. The project of educational e-environment implementation is expensive.

Sustain development. It should be sustainable, not based only on one large project. Insufficient support and training of teaching staff. Teachers are focused on their disciplines. They are not able to spend a lot of time with working in a software application, which is not necessary for their research field. They should find support and help quickly.

Izabella Alvarez:

Besides the points already mentioned above, I would say also:

- Limited technological formats, that can limit the use of some methodologies
- The need to have a web server, access difficulties and problems with communication
- Greater difficulties of understanding and incorrect interpretation of the intentions of a stakeholder towards the attitude of another one
- Promotion of reflection and development of critical spirit by creating online discussion groups

17. Nataliia Morze:

Name three advantages (for student, teacher, Rector, University) in developing the educational environment of the university.

Eugenia Smyrnova-Trybulska:

For students:

- Availability of educational sources 24 hours a day in a permanent mode
- Flexibility of the mode of learning
- Availability of current data

For teachers:

- Possibility of easy updating their own distance courses for different categories of students and specializations, preparing new editions
- Easy management of the educational process and assessment (in test form)
- Easy communication with a lot of students and coordinating groups, collective work,
- other

Martin Drlik:

For students:

- availability of the educational materials,
- improved quality of the educational process, because provided educational content will have the similar structure, extent and evaluated using the same criteria,
- possibility to study outside the classroom.

For teachers:

- improved teachers' work, knowledge and experience with modern tools,
- availability of educational materials at one place,
- improved management of learning process.

For university management:

- PR of the university, because it prefers and provides modern approaches,
- visibility of the university, and consequently better position in international rankings, if the resources are public,
- teaching staff quality improvement.

Izabella Alvarez:

For students: Better and quicker access to contents and documentation.

For teachers: The promotion of reflection and development of a critical mind through the creation of groups of online discussion.

For rector and university: The institution offering an e-environment is considered a modern university facing the future and so motivate new students that there is the right place to study.