Quality features of university information environment in its external indicators

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Abstract: The paper represents the preliminary results of the ongoing comparative study of information environments in the frame of the European project 'IRNet'. The aim of this study is to substantiate and verify a set of external indicators for the virtual educational environment of the University, which allows to determine its quality and to identify concrete ways for its further improvement. This research phase was conducted within three universities: Borys Grinchenko Kyiv University in Ukraine, Constantine the Philosopher University in Nitra, Slovak Republic and Herzen State Pedagogical University of Russia. The Research instrument contains three sections (dimensions): characteristic of Open University resources; the questionnaire, detecting students' information behaviour and attitude towards different networking activities in university information environment; global ranking of university internet integration. The study shows that the proposed set of indicators allows to determine the overall level of university virtual learning environment development and to identify specific areas for its improvement. For a more complete study of the university virtual environment, the developed set of tools must be supplemented by internal indicators reflecting e-learning methodology, achieved educational outcomes, etc. But it is the task of the next phase of the study.

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1   Introduction

Today we are witnessing several trends in education: globalisation of education, rapid change of professional activities and also education reforms in Europe and in other countries (Stromquist, 2014). Educational environment is changing, in general, at all levels, from global to institutional. On the whole, the features of the educational environment are determined by many factors: legal, social, technical, ethical and human. Moreover, all the factors have different scales of influence: global, national, institutional or personal. For example, on the global level, we witness the migration of the educational and labour market, demands for international diplomas and certificates of recognition and the compatibility of education. On personal level, we should take into account that

contemporary students are representatives of the information society and that their educational strategies and information demands are significantly different from those of several decades ago. Psychologists and paedagogues have marked mental, physiological and personality changes of today's youth (Feldstein, 2010).

Consequently, required quality research of the educational environment today is demanded. Of particular importance is the study of the virtual or the network part of the educational environment where educational interaction changes significantly and new aspects of educational outcomes are manifested.

In light of active e-learning development in all educational institutions, there are several questions that come to the forefront: what are the main characteristics of information and communication environment; what is the role played by the university in the global educational space; what are the ways of university's integration into global information space; and how the university's virtual environment considers preferences and information behaviour of students.

It is obvious that different countries have developed their own systems of quality assessment of the university educational environment and those of quality indicators. However today the high school system is involved in the process of building a unified educational space; there is a possibility of academic mobility and distance education in various universities is increasing.

Versatile ways of estimating the quality and functionality of the information environment of the modern university are being demanded. This is a multifaceted problem that requires consideration of a great number of internal and external factors related to technical infrastructure and resources of the university, teaching and learning activities in the digital space, e-learning management process, educational policy, etc.

These are the reasons for the development of international projects aimed at research and development of new tools for advanced paedagogical science in the field of ICT instruments, distance learning and intercultural competences, international research network (IRNet) project being one of the examples (Kommers et al., 2014). In this paper, reflecting the IRNet research project results, the main features of the university virtual educational environment are correlated with the standards and guidelines for quality assurance in higher education in the European region, global university rankings and information student's behaviour in different countries. This article contains the comparison of these aspects in three universities: Herzen state paedagogical university of Russia, Saint-Petersburg (HSPU), (www.herzen.spb.ru); Constantine the Philosopher University in Nitra (UKF), (www.ukf.sk), Slovak Republic; Borys grinchenko kyiv university (BGKU), (www.kubg.edu.ua), Ukraine.

The set of evaluation tools for university virtual learning environment with regard to its external indicators was proposed and tested in the universities mentioned above. Development of the internal indicators system is the task of the next phase of the study.

2   General characteristics of the university information environment

Nowadays, information environment based on ICT has already been created at almost all universities. In many institutions of higher education, it is applied as a medium of remote support of full-time study, and the organisation of extracurricular homework. But, unfortunately, sometimes it occurs in the same paedagogical paradigm as traditional classroom activities. Therefore, in this virtual part of learning space innovative 'growth