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# **Open E-environment – The Key Instrument of the Education Quality**

#### **Abstract**

Creation of an open e-environment is one of the main tasks of universities as its use for educational purposes enhances the quality of education of the modern university. A checking tool of the quality and transparency of e-environment in the world is the use of rating systems. The article describes the main global educational ratings and the impact of their indicators on the university work, the development of internal ratings of university structural divisions based on indicators of the Webometrics rating. An analysis was made of the publication activity of scientific and pedagogical staff using the Ukrainian information-analytical system "Bibliometric of Ukrainian Science" and a comparative study was performed to analyse the qualitative provision of masters by the teaching staff based on the newly-established and implemented in the BGKU rating system "E-portfolios."

K e y w o r d s: open e-environment, rating, quality of the educational process, publication activity, e-portfolio

#### Introduction

The main task of the modern university is to improve the quality of education, ensuring its compliance with national, European, and international professional standards and activation in the international and European educational space. The modern labor market requires the transfer of emphasis from the educational

process to its ultimate qualitative results. To ensure the quality of the educational process one must comply with the standards and recommendations, developed by the European Association for Quality Assurance in Higher Education (ENQA). The Quality Assurance System in Higher Education (QASHE) consists of a quality assurance system for educational process and quality assurance (internal quality assurance system) and an external quality assurance system of educational activity at the university (Kremen, 2014).

The system of external quality assurance of educational activity at the university suggests maintenance of the efficiency of processes and procedures for internal quality assurance, ensuring availability of a system for procedures implementation of the external quality assurance process, publishing the criteria for decision making, accessible and understandable reporting, periodic audits of quality systems functioning and of mechanisms of work with received recommendations. Internal quality assurance of educational activity involves determining the policy of the university and procedures for quality assurance, monitoring and review of educational programs, evaluation of students and teaching staff, including publication the results, ensuring quality of teaching staff and of educational resources, the availability of electronic informational systems and ensuring publicity of information.

The experience of the Borys Grinchenko Kyiv University shows that to ensure qualitative educational activity, a strategy and plans of the university along with section "Assurance of Educational Quality" should be adopted; indicators for assurance of internal quality standards should be developed; corporate standards of a university should be developed and a qualitative open electronic informational and educational environment should be created (Morze, Buinytska, & Kocharyan, 2015).

## **Open Electronic Environment of the University**

# Creation of an Electronic Informational-Educational Environment of the University

Development of corporate standards, creation of a personal learning environment of a student and a teacher are ways to create an electronic informational-educational university environment.

The university's electronic informational-educational environment consists of e-content and technology of e-influence and e-collaboration. Within the e-content we highlight text, graphics, multimedia, and links to resources. The e-environment content includes open e-resources and limited access. Open e-resources are characterized by free, fast, permanent, full-text access in real time to scientific and

educational materials that are available to any user in the global informational network (Ogneviuk, 2014). Work with e-resources with restricted access authorization is necessary. More information can be found on the e-content of BGKU on the official portal http://kubg.edu.ua/ in the menu Resources – E-environment (Figure 1).



Figure 1. Electronic informational-educational environment of BGKU.

# Development of Electronic Informational-Educational Environment of the University

An important condition for the effective functioning of electronic informational-educational environment is its transformation into an open system thanks to interaction with the labor market, providing students with more control over the educational process by participating in its planning and evaluation of quality, ensuring self-control and self-assessment. Functioning of an open e-environment in this case will be the basis for academic and scientific mobility of all participants in the educational process, as well as a means of strengthening of the subjective position of students during the teaching process. The main requirements for the development and usage of e-environment is understanding its purpose, creation of qualitative content, and effectiveness of interaction technologies used by participants in the educational process. During the course of usage of qualitative open e-environment teaching, assessment, curriculum, informational-training platforms, science, management, and reporting will be open accordingly. This, in turn, will enable the exchange of ideas, cooperation between institutions, teachers and students, and will have a positive impact on the quality of the educational activity of the university.

### Quality Monitoring of Educational Activity at the University

### University Ratings during the Monitoring Process of the Educational Activity

Determining the level of educational services and the effectiveness of the scientific work at the university helps to rank higher education institutions (RHEI) – the process and mechanism of performance of higher education institutions or educational programs based on certain criteria and also determine the appropriate ratings (Kremen, 2014).

In many Western countries, the rating is one of the tools for evaluation of university activity. The term "rating" – from the Latin *ratio* (noun), *reor*, *reri* (verb) – means 'score', belonging to the class level, group, category (Zimenkovsky, 2010). Recently, there is a growing interest in the global rankings of universities that take into account indicators of qualitative education. Definition of the integral index for quality of the university activity is due to the need of mutual recognition of curriculums in combination with the needs of the modern labor market.

The aim of universities ratings is:

- to provide information to applicants, students and their parents, investors, employers, university administration;
- to stimulate universities to self-assessment and thus identify the strengths and weaknesses of their activities, and, therefore, enhance their competitiveness through modernization and flexibility of educational programs;
- to form a single unified system of indicators to evaluate the quality of universities.

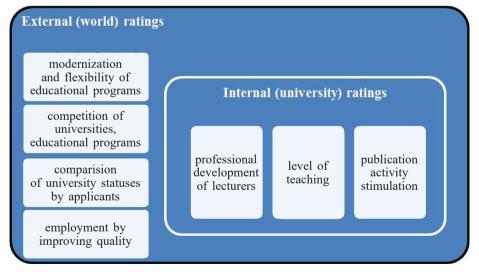


Figure 2. The main objectives of the use of ratings.

The advantage of the rating system is its independence from official state structures that undermine their influence on the assessment of the quality of education.

The key indicators of the quality of educational activity of the university (http://www.euroosvita.net) can serve as indicators of external (world) and internal (university) ratings, objectives of which are reflected in Figure 2.

#### **Quality of Educational Activities by World University Rankings**

The leaders among authoritative world rankings are Shanghai (ARWU), THES-QS, and Webometrics. The Shanghai (Academic Ranking of World Universities - ARWU) ranking of universities is focused solely on the research activities of the university. When the ranking is made, selected are only those universities whose staff academic or graduates have a Nobel Prize or Fields Medal. In the methodological aspect when forming the Shanghai ranking the stress is put on easily accessible data sources, including publicly available data on the number of publications, citation indexes, etc. Among the main indicators one can underline: quoting of professors' scientific work listed on the basis of 21 major scientific disciplines according to ISI Highly Cited, number of articles published in Nature and Science for the last 5 years, the number of links to articles in other scientific studies (counting based on SCIE - Science Citation Index Expanded, SSCI - Social Sciences Citation Index, and AHCI – Arts and Humanities Citation Index). To get into it, it is necessary to "publish a significant number of works included in the Expanded scientific citation index (SCIE), citation index in Social Sciences (SSCI), citation index in arts and humanities (AHCI)" (http://www.shanghairanking.com/).

During ranking formation of the version of "The Times" (THES-QS) (http://www.topuniversities.com) the quality of research, competitiveness of alumni, international recognition, the quality of teaching are taken into account. Particular attention is paid to the scientific community feedback and citation index of works. Only 27 Ukrainian universities are listed in this ranking, six of which came in the top 1,000.

One of the most important indicators of the quality in both rankings is quality of the teaching staff, which is determined by level of citation of professors and faculty members in international scientific literature.

In terms of science-metrics database Scopus (http://jsi.net.ua/scopus) as of July 2015, 124 from Ukrainian universities got into it, the leader among them is the Taras Shevchenko National University of Kyiv (the number of publications in Scopus 12,416, the number of citations – 49,991).

Database developers not only count the number of publications, but also assess effectiveness of research and quality of the scientific publications in order to create the ranking of scientists of Ukraine. It is believed that: "If your papers are not in the databases of ISI – the most famous US scientific database – then you, as a scientist, do not exist [...]" (Rozhen, 1999). On the basis of this ranking scientists are rated

in the Hirsch index (researcher's h-index equals to N if he or she is the author of at least N items, each of which was cited at least N times, the remaining articles were cited less than N times), and within it by the number of citations. These are the figures excluding self-citation of all co-authors.

A significant disadvantage for Ukrainian universities is that in the world's most influential science-metrics databases Web of Science and Scopus mainly English-language publications are taken into account, and those that meet international requirements to scientific publications (publication cost starts at \$500). Access to the review and studies of scientific publications, listed in databases requires a paid subscription. All this led to relatively low rates of Ukrainian universities in these science-metrics databases.

Today, for Ukrainian universities the most effective tool for comparative assessment of educational quality in accordance with generally accepted international criteria is the Webometrics ranking, because the perspectives of appearance in the ARWU ranking significantly depend on the hard solving subjective factors (final grades are dependent in 40% on the opinions of English speaking experts who graduated from leading Western universities) and on more complex objective factors related to financing (it is believed that the annual budget of the university which is a part of the ARWU and THES rankings should be about a billion dollars, which is 10–100 times more than the leading Ukrainian universities have, for example) and other factors (e.g., in the universities of the United States and Canada top managers receive bonuses of \$10–20 for upgrading the level of the university in the list, which is not yet possible for Ukrainian universities).

Generally, the conception of the Webometrics ranking of the world's universities can be explained by Bill Gates's words: "If you are not on the Internet, then – you do not exist." The university cannot attract talented students and teachers at the global level (and hence to prepare high-quality professionals) without being effectively presented on the Internet. Accordingly, an assessment of Internet presence is one possible measure of the university's activity worldwide that is defined by a special methodology, developed in accordance with Berlin Principles on Ranking of Higher Education Institutions, defined by UNESCO.

The Webometrics rating (http://www.webometrics.info) is based on the analysis of official websites of educational institutions, so it includes only those universities that have their own independent web domain. The analysis takes into account various indicators that characterize the scope, presence, and importance of online presence of the universities. The purpose of the rating is not to evaluate websites, their design, convenience, popularity, or their content which is based on the number of visits and visitors. Web indicators used in the world for an independent, detailed rating of global university performance, taking account of its activities and results, their significance and impact.

The basis of the rating depends on two main criteria that take into account your university domain data (each criterion has a certain weight corresponding to its importance):

• Visibility, 50%.

Impact, 1/1 evaluates by the "virtual referendum," counting all the external links that the University receives from third parties (quoting website pages). It is calculated from the number of feedbacks and number of domains from which place feedbacks. So the variety of links is important, not their "popularity."

- Activity, 50%.
- Presence, 1/3 is determined by the total number of webpages located on the main web domain (including all subdomains and directories) of the university, indexed by the major commercial search engines, such as Google.
- Openness, 1/3 counts the total number of files and records with the correct name of the file (pdf, doc, docx, ppt), published on specialized websites (including institutional repositories), according to the web academic search engine Google Scholar.
- High quality (Excellence, 1/3) calculates the number of scholarly papers published in influential international journals. Indicator is limited by counting publications among the top 10 percent most cited in their respective fields. Information is provided by research laboratory SCImago.

It is important to say that Webometrics, existing since 2004 integrated rating system of university activity, accounts for Scientific Publication activity of university scientists exclusively on the basis of Google Scholar. Currently, Google Scholar covers almost all sources of ISI database and additionally includes a large number of collections of scholarly publications on various types of webdocuments, including the post-Soviet information space. This is important given the fact that, for example, the database ISI indexes cover only one-third of the 25-thousand peer-reviewed journals, and only 15% of the annual volume of indexed publications presented in an open access.

The Webometrics Ranking of World's Universities as of July 2015 saw 295 Ukrainian universities outside the list. Unfortunately, the first thousand did not include any of the Ukrainian universities (National Technical University of Ukraine, Kyiv Polytechnic Institute – 1,544, the Taras Shevchenko National University of Kyiv came 1,590, National Aviation University – 1,967). The Borys Grinchenko Kyiv University (hereinafter – BGKU) took 6,051 position in the world ranking (with 23,717 universities), 407 among the countries of Central and Eastern Europe and 29 among Ukrainian universities.

#### **Analysis of Public Educational Activities at Webometrics Rating of BGKU**

Now we will proceed to analyse the main criteria for Webometrics rating of BGKU (http://kubg.edu.ua/resursi/webometrics.html) and explore their impact on the quality of educational activities.



Figure 3. Criteria of BGKU in the Webometrics ranking (July, 2015).

Comparing the criteria rating for the past three periods (Table 1) we can see the growth of two indicators – the presence and impact. Figure 4 shows the improvement of the impact indicator which went up compared to July 2014 by 36%. LED indicator is the product of the square root of the number of feedbacks and the number of domains that come from feedbacks. Therefore, it is important not only to link popularity, but also their variety. Index indicates the institutional prestige, success, value, and usefulness of data services that are on web pages according to the criteria of millions of web editors around the world. The data from the visible links are collected from two major suppliers of information: Majestic HYPERLINK (http://www.majesticseo.com/ SEO) and Ahrefs.

In order to improve significantly the most influential figure links to the university should be placed on domain kubg.edu.ua at all possible external resources (websites, blogs, and social networks); when placing articles on the websites of departments and institutions rely on the main portal of the university; duplicate information in social networks, sharing posts, etc.

If criteria of the first component visibility (impact) improved, the second – activity in general deteriorated, except the indicator of presence.

Criteria oi b	ena of BGKO in the Webomethes ranking							
Period	World criteria	Rating in the country	Presence	Impact	Openness	Excellence		
July 2015	6051	29	624 1	8392 ↑	1663 ↓	5489 ↓		
February 2015	5336	48	953 ↑	11719 †	1257 ↑	5414 ↑		
July	6345	61	990 ↑	13018 ↓	1499 ↑	5442↓		

Table 1. Criteria of BCKII in the Wehametrics ranking

2014

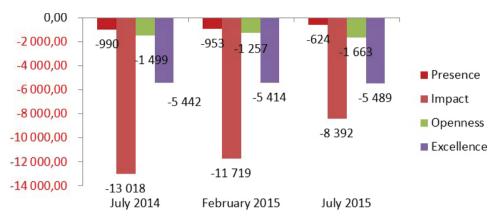


Figure 4. Comparison chart of rating changes.

Compared with July 2014 the presence indicator improved by 37%, the impact -35%. Rating presence (number of indexed web pages most commercial search engine Google) of the university has increased due to the large number of sites and pages on them. Today the university maintains more than 70 sites in the domain kubg.edu.ua.

For the year BGKU has lost its position in key indicators of openness and excellence, which directly reflects the scientific achievements of universities in the world information space. The score of excellence substantially remained unchanged (even though it fell by 75 positions in comparison with February 2015), which proves that when we place articles in famous international journals authors do not indicate their current job (BGKU) and the account of the BGKU is absent in authoritative international science-metrics databases (Web of Science, Scopus). If, for example, in the first semester of the academic year the teaching staff of the BGKU will activate by placing their research portfolio in the public domain (an indicator of openness rose by 16%), but at the end of the school year this rating fell to 25%, indicating either a decrease in publication activity of teaching staff of the BGKU, or fear of placing their works in the public domain for the global scientific community (and this is excellence!).

With the publication of articles in famous international journals heads of higher education institutions have to evaluate research activities of each employee, departments, laboratories, as well as the number of publications and citations. Moreover, they analyze the results of research to get objective information about scholarly activity not only within the university but also with respect to the leading Ukrainian and international institutions to be competitive in the educational market.

Evaluation of Scientific Publication activity of universities ranged by individual rating Webometrics exclusively in Google Scholar – rated institutional repositories (Ranking of Repositories). Its main criteria are the size (Size) – 10%; Visibility (Visibility) – 25%, and 25% is allocated to the following sources: Academia,

Facebook, LinkedIn, Mendeley, ResearchGate, Slideshare, Twitter, Wikipedia (all editions), Wikipedia (English version), YouTube, and Skribd; rich files (Rich files) – 10%; indexed Academy (Scholar) – 30%.

According to the ranking (Table 2) as of July 2015, BGKU rose from 28th to 15th place for the period of 2014/2015 among 46 Ukrainian universities presented in the ranking. Among institutional repositories in the world, institutional repository of BGKU took 895th place (rising 383 positions) from 2,239 of those listed in the ranking.

To improve indicators of webometrics ranking an internal ranking was developed at KUBG structural units, based on Webometrics. The results of internal ranking are calculated monthly that allows the heads of departments to see to which indicators should be paid special attention. Internal ranking is published on the official portal of BGKU (Figure 5).

For a better perception of the internal ranking indicators visualization according to indicators and periods is realized (Figure 6).

As it is crucial for BGKU to improve the indicators related to scientific and publishing activity of teaching staff the filling of the institutional repository is constantly monitored.

Table 2. Indicators of Institutional Repository ranking by Webometrics for BGKU

Period	World ranking	Ranking in the country	Size	Visibility	Rich files	Google Academy
July 2015	895	15	1172 ↓	1396 ↑	487 ↑	496 ↑
February 2015	1278	26	1014↓	1736 ↑	680 ↑	767 ↓
July 2014	979	28	1014↓	1754 ↓	763 <b>†</b>	277 ↑

		Visibility		Activity				Jo	
Department	Department webpage	Referring Domains	External Backlinks	Visits last month	Google PR	Bing Index	Yandex Citation Index	Ranking	Place in the rating the University Departments
Institute of In-Service Training	ippo.kubg.edu.ua	41	45 005	5 002	5	1880	30	10205	1
University College	uk.kubg.edu.ua	16	55	6 813	4	773	30	1459	2
Humanitarian Institute	gi.kubg.edu.ua	14	49	6 878	4	553	20	1447	3
Institute of Society	is.kubg.edu.ua	18	149	4 519	4	473	40	991	4
Pedagogical Institute	pi.kubg.edu.ua	12	69	4 127	4	586	10	903	5
Institute of Human Sciences	il.kubg.edu.ua	13	1 490	2 677	0	579	10	896	6
Institute of Arts	im.kubg.edu.ua	10	115	2 273	0	665	10	548	7

*Figure 5.* Internal ranking of BGKU departments based on Webometrics indicators (July 15, 2015).

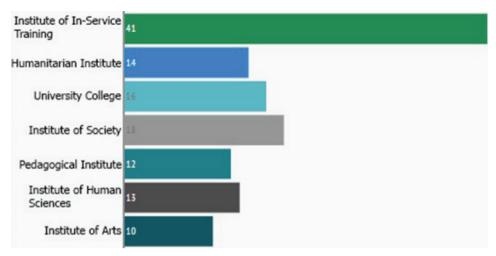


Figure 6. Visualization of internal ranking criteria (July 15, 2015).

For the academic year 2014/2015, the number of publications in the IP increased in 3,896 positions and counts today 7,055 scientific works of scientific-pedagogical staff. The number of scientific papers (articles, books) submitted to the institutional repository with the unit division is shown in Figure 7.

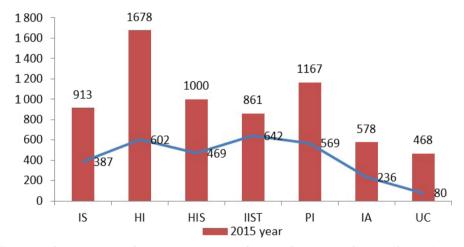


Figure 7. Comparison of the total number of scientific works of scientific-pedagogical staff submitted to the institutional repository (division by institutes).

Despite the fact that the number of scientific works of scientific-pedagogical staff deployed in the institutional repository exceeds 7,000, the amount of works per one employee of the university is critically low, besides the fact that it has risen from 3 to 7 publications.

Low quantitative indicators of the publications placed in the institutional repository indicate that not all scientific-pedagogical employees of BGKU submitted to the system filed in their own scientific work, or the university has a rather low level of publishing activity, and, respectively, and the low indicator of ranking by Webometrics.

Taking into account low ranking indicators of scientific and publishing activity in the global informational space it is not possible to expect scientific-pedagogical staff of BGKU to appear in international rankings of scientists.

# Evaluation Results of Educational Activities by Information – Analytical System "Bibliometrics of Ukrainian Science"

National system of evaluation of the effectiveness of complex scientific component in the university environment is information-analytical system "Bibliometrics of Ukrainian science." It is intended to provide a coherent picture of the society of national scientific environment.

Information resources information-analytical system "Bibliometrics of Ukrainian Science" is formed by processing:

- created by scientists on the platform Google Scholar bibliometric profiles containing verified information on the results of publication (this platform has the largest amount of indexed scientific papers and is publicly available);
- bibliometric indicators of Scopus, Web of Science, Ranking Web of Research Centers, Russian scientific citation index.

Information-analytical system "Bibliometrics of Ukrainian Science" is a scientometric add-on in Google Scholar bibliometric profiles of subjects and objects of national documentary communications. It shows research results in the form of profiles submitted as a report on the results of public research activities of the university. That is why the Internet activity of scientific-pedagogical university employees should be considered as an integral part of their professional activities. The system is a source base for the independent expert evaluation of the results of educational, scientific activities including local universities and educators.

In the rankings this system is an opportunity to familiarise with indicators of scientific activity of the scientific-pedagogical staff of the university as Google Scholar and Scopus, as well as analyze criteria ranking based on their scientific and professional activities. The maximum h-index of Ukrainian scientists in Google Scholar is 57, in Scopus -40.

The main problem for BGKU is an open scientific e-content and its placement in leading scientific journals that are indexed in science-metrics databases. For this reason, BGKU is not displayed even in the ranking of Ukrainian universities (only two scientific-pedagogical staff of BGKU in Scopus Hirsch index is 1, the other – indexed publications available). However, information-analytical system "Bibliometrics of Ukrainian Science" (http://www.nbuviap.gov.ua) displays 230 scientific-pedagogical staff of BGKU in which Hirsch index (h-index) on

Google Scholar greater than zero (2 scientific-pedagogical staff with 18-20, 176 PNP -1-8).

According to the rating researchers in the public domain only indexed works of 230 scientific-pedagogical staff of BGKU of the 698 are working at the university. Among them there are 280 Doctors of Philosophy and 59 Doctors of Science. Therefore, the task of the university employees is to create and update their own profiles in bibliometric Google Scholar, which will help the university to improve rating quality indicators of educational activities.

#### "E-Portfolio" as an Internal Tool of BGKU Educational Activities

To understand the whole picture quality of scientific-pedagogical staff of the university, we have to implement the Law on higher education, where quality and presence of the openness of universities is a priority, and develop a system of internal ratings BGKU staff – E portfolio (http://e-portfolio.kubg.edu.ua). The system displays the activities of scientific and pedagogical staff, which affects the performance of quality assurance of university education in line with European standards. Relationship between indicators of "e-portfolio" with e-environment and quality standards of education is shown in Figure 8 (Morze, & Varchenko-Trotsenko, 2014).

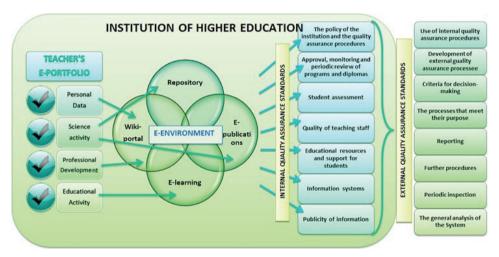


Figure 8. Relationship between e-portfolio, e-environment and quality standards of education.

S o u r c e: Morze, Varchenko-Trotsenko 2014.

The key indicators of the system "e-portfolio" from which an internal rating of scientific-pedagogical staff of BGKU calculated, is scientific research activity (40%) containing profile data scientist at Google Scholar, the number of publications in international journals, monographs, textbooks, participation in

international and national research projects; teaching activity (40%) – developed and certified electronic training courses, participation in international, national games and competitions; professional development (20%) – training, grants, scholarships, copyright, etc.

Due to the developed form of the user profile in "e-portfolio" there is provided a functionality of filing data manually and automatically by the BGKU academic staff:

- · upload photo;
- filling data tables, which are introduced by scientific-pedagogical staff;
- update of tables with data on the implementation of research activities that are loaded from the database of Institutional Repository of BGKU;
- update data tables for a list of teaching disciplines and designed and certified electronic courses on database workload systems and e-learning;
- a code generator for e-portfolio for Wiki portal;
- calculating points regarding the current system of weighting coefficients assessment guidance and training activities of scientific-pedagogical staff.

As approved by the Academic Council of BGKU, weighting coefficients automated system is operated counting points of each employee. The system provides the ability to update points over a period of such year.

The system allows scientific-pedagogical staff to rank for institutions, units, departments, positions, academic titles, which, in our opinion, will promote competition between the scientific-pedagogical staff of BGKU and enhance a number of all types of employees.

### **Quality Assurance for BGKU Masters**

In order to analyze the quality of education provided by the BGKU, let us analyze the quality of the provision of one of Master's specialization that is social pedagogy. Training for students is provided by 24 full-time BGKU lecturers from ten departments of three institutes. Among the teachers involved in the learning process there are Sc.Ds. -12%, Ph.Ds. -71%, and lecturers -7% (Figure 9):

- Social pedagogy and social work: Doctors of Science 1; Doctors of Philosophy – 5; lecturers – 2
- Universal age and educational psychology, Doctors of Philosophy– 3; lecturer 1
- English: teacher 1
- Public administration and management education: Doctors of Philosophy 1
- Informatics: Doctors of Philosophy 1
- Philosophy: Doctors of Philosophy 1
- Theory and History of Education: Doctors of Science 1, Doctors of Philosophy 1
- Social psychology, correctional and inclusive Education: Doctors of Philosophy
   3
- Anatomy and physiology, Doctors of Philosophy 1
- Law: Doctors of Philosophy 1.

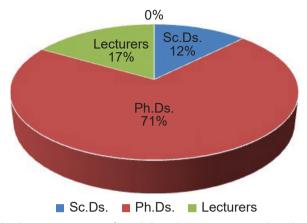


Figure 9. Qualitative assurance of social pedagogy, master level.

Since we chose to analyze the MA level, the scientific-pedagogical staff involved in the learning process should be highly skilled and recognized in scientific circles of Ukraine.

As a result of internal university ranking of departments, average value of scientific-pedagogical staff's ratings was calculated (Table 3). Also consider to allocate the average value of scientific-pedagogical staff ranking to the department exclusively for the research activity, since this is a key indicator that correlates with the world.

Table 3.

Average rating criteria involved scientific-pedagogical staff in terms of BGKU departments

Institute	Chair	Position in the department's ranking	Position in the Institute's ranking	Position in the BGKU ranking	BGKU ranking for research activities
	Social work and social education	5	21	128	91
	General, age and pedagogical psychology	7	25	182	153
Institute of Human Science	Special psychology, corrective and inclusive education	4	16	66	66
	Anatomy and physiology	5	17	78	222
	In general	5	20	114	133

Institute	Public administration and education management	5	42	283	286
of Society	History	5	9	65	10
	Philosophy	6	43	362	427
	Law	7	80	702	702
	In general	6	44	353	356
	English language	6	112	385	442
Humanitarian Institute	Theory and history of pedagogy	6	33	92	102
	In general	6	73	239	272

Institute of Human Sciences advisedly made distribution of workload among employees of departments, where the specialty is opened.

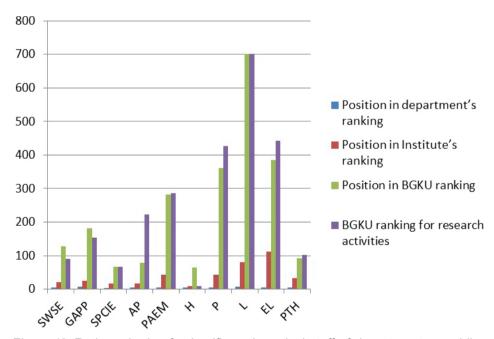


Figure 10. Rating criteria of scientific-pedagogical staff of departments providing specialty training.

Given the low ranking of the world's main performance indicators of the quality of education departments, providing training in social pedagogy, see the need for substantial improvement of Scientific Publication activity of BGKU's academic staff, including adherence to corporate standard of scientific staff. After

all, only in this way can a much larger number of students (MA students/graduate students in the group of 8–10 people) be attracted to BGKU training, and pay attention to the quality of education employers.

#### Conclusion

The open information and education e-environment of the university contributes to the efficiency and quality of the learning process, intensification of the process of scientific research, an increase in efficiency and effectiveness of university administration and the education system as a whole, integration of national educational information systems in the global network that facilitates access to international information resources in education, science, and culture. An obligatory condition for its use and development is openness and transparency.

To ensure the quality of the educational activities of the university it is necessary to adhere to standards and guidelines developed by the European Association for Quality Assurance. Key quality indicators are used in the most authoritative world rankings of universities. The analysis of world rankings and using them to implement internal rating systems makes it possible to identify weaknesses of activities that would guarantee further development, and work out strategies to improve management decisions as well as the intensification of structural units and employees to raise the quality of educational services at the university. The improvement of the issue of quality indicators of educational activities is a necessary condition for the development and compliance with the education policy of the university and its corporate standards.

Internal ratings system enables to determine teachers' affiliation and their contribution to creating a positive vector of activity for development of academic staff of the university influences the formation and development of e-environment, which is essential to ensure the quality of educational activity.

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#### Otwarte e-środowisko – kluczowy instrument jakości kształcenia

#### Streszczenie

Jednym z głównych zadań uczelni jest stworzenie otwartego środowiska elektronicznego, ponieważ jego wykorzystanie do celów edukacyjnych podnosi jakość kształcenia współczesnego

uniwersytetu. Z kolei narzędziem kontroli jakości i transparentności e-środowiska na świecie jest stosowanie systemów ocen. Artykuł opisuje główne ogólnoświatowe rankingi edukacyjne oraz wpływ ich wskaźników na funkcjonowanie uczelni, a także rozwój wewnętrznych systemów oceny jej poszczególnych jednostek na podstawie wskaźników Webometrics. Analizie została poddana działalność wydawnicza kadry naukowo-dydaktycznej, do czego wykorzystano ukraiński system informacyjno-analityczny "Bibliometria ukraińskiej nauki". Opracowana została analiza porównawcza jakości kształcenia młodej kadry akademickiej, oparta na nowo powstałym i wdrożonym w Kijowskim Uniwersytecie im. Borysa Grinczenki systemie oceny "E-portfolio".

Słowa kluczowe: otwarte e-środowisko, ranking, jakość procesu kształcenia, działalność publikacyjna, e-portfolio

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# Открытая электронная среда – ключевое средствообеспечения качества образования

#### Резюме

Создание открытой электронной средыя вляется одной из основных задач университетов, поскольку ее использование в образовательных целях повышает качество образования в современном университете. Рейтинговые системы являются инструментом контроля качестваи открытости электронной среды в мировом масштабе. В статье описаны основные глобальные образовательные рейтинги и влияние их на показатели работы университета, а также представлено развитие внутренних рейтингов университетских структурных подразделений на основе показателей рейтинга Webometrics. Проанализирована публикационная активность научно-педагогических кадров с использованием украинской информационно-аналитической системы «Библиометрия украинской науки»; произведен сравнительный анализ качества работ магистров с использованием новой, реализованной в БКГУ рейтинговой системы «Е-портфолио».

К л ю ч е в ы е с л о в а: открытая электронная среда, рейтинг, качество образовательного процесса, публикационная активность, электронное портфолио

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#### Entornos abiertos – los instrumentos clave para una educación de calidad

#### Resumen

La creación de un entorno abierto virtual es una de las principales tareas de las universidades, de la misma manera que su uso con fines educativos mejora la calidad de la educación de la universidad moderna. Una herramienta de verificación de la calidad y la transparencia de e-entornos en el mundo es el uso de sistemas de clasificación. El artículo describe las principales calificaciones educativas globales y el impacto de sus indicadores en el trabajo universitario, el desarrollo de las calificaciones internas de las divisiones estructurales universitarias basadas en indicadores de la calificación

Webometrics. La actividad del publicación de personal científico y pedagógico se realizó utilizando el sistema de información analítica de Ucrania el sistema "bibliométrico de la ciencia de Ucrania", y un análisis comparativo de la oferta cualitativa del personal docente según a los "e-portfolios recién establecidos e implementados en el sistema de calificación BGKU".

Palabras clave: abierto e-medioambiente, de calificación, de calidad del proceso educativo, actividad, publicación, e-portfolio