# Internal Quality Assurance of the Education Program at Higher Educational Institutions

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#### Abstract

Ongoing efforts on internal quality assurance of the educational program at higher educational institutions should be based on comprehensiveness and constant innovative activity. The development of modern and effective ways and measures in order to ensure the quality of educational programs is relevant both for modern higher educational institutions in practice and in the theoretical and methodological plane. The purpose of the research lies in establishing the principles of ensuring the quality of the educational program, which should be applied to achieve high quality teaching following the educational program of higher educational institutions in Ukraine; determining the shortcomings and prospects for the development of educational programs (curricula) and their assessment by educators. In the course of the research, an interpretive qualitative study has been used; along with this, the experiment as the main method, the methods of description, questionnaire and observation have been also used in the academic paper. The research hypothesis lies in the fact that ensuring the quality of the educational program is based on a balanced complex of innovative theoretical principles and their practical implementation. The result of the research is the establishment of the fundamentals for ensuring the quality of educational programs of higher educational institutions, taking into account their innovative nature and the evaluation of the strengths and weaknesses of the curriculum by the participants of the educational process. In the prospect, the implementation of research programs for the further development and improvement of the quality and demand of educational programs of the HEI at the level of the world market of educational services is expected.

**Keywords:** quality, higher education, management, formative assessment, quality control, model of control, higher educational institution (HEI)

#### 1. Introduction

Management of higher education in Ukraine is a centralized process, and one of the main tools for ensuring the quality of the EP (educational program) in university education is the continuous improvement of the efficiency of the educational activity. These processes require internal support. In numerous previous studies on education management systems, conducted by Meemar, Poppink and Palmer (2018), it has been noted that the establishment of dominance in education by government authorities sets the general standards for the system; they are responsible for the selection of managers and staff, the definition of standards and curricula, the establishment of educational policy, the distribution of finances, the exercise of control functions and the administration of educational processes. Centralized forms of education management exist in developing countries, where education providers are the central body of education

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#### management.

Internal quality assurance of EP is based on the principle of centralization of educational services in Ukraine. Internal and external control over the quality of university education helps to work on improving the level of educational services, constantly analyze the degree of satisfaction of customers and employees, and determine prospects for improving the quality of education.

The innovative models of implementation of quality control of the educational process are considered in research practice on the individual basis (Ricci, 2019; Slipchuk et al., 2021). This is primarily the consideration of the institution's activity, its proactive attitude, the role of students in the formation of the educational policy of the institution, the influence of the teaching staff on the administrative policy and research activities of the university.

A number of studies (Centobelli et al., 2019) pay attention to the fact that in the centralized education system, universities (higher educational institutions) as well as external management bodies are interested in ensuring the quality of education. Such interest imposes an additional burden on the scientific and pedagogical staff of institutions; it sometimes leads to exhaustion, professional burnout, loss of interest in the profession. (A-Maawali & Al-Siybi, 2020) This is also a problematic field that requires searching for a balance between ensuring the internal quality of the educational program without overload and stress for all subjects involved in its implementation.

In a number of scientific works, the main difficulties faced by higher educational institutions during the implementation of reforming educational institutions, improving educational programs, etc. have been identified. Foremost, the lack of a clear system of accountability, corruption, peculiarities of mentality, outdated traditions and bureaucracy were mentioned. All this hinders the intentions of building democratic relations, delegating decision-making and decentralization. In the framework of the internal regulation of the university development strategy and the transformation of educational programs, it is necessary to take into account the difficulties faced by young democratic countries (UNESCO, 2014). It was for the purpose of ensuring the availability of education and improving the quality and democratic development of education in Ukraine that a specialized collegial body NAQA (National Agency for Quality Assurance of Higher Education) (https://naqa.gov.ua/#) was created, one of the governing bodies of higher education, provided for by the Law of Ukraine "On Higher Education" dated July 1, 2014, which entered into force on September 6, 2014.

This has made it possible to improve educational results, increase the requirements for ensuring the quality of university education, as well as posed a number of research tasks as follows: to find out the effectiveness of the introduced improvements, to develop an algorithm for creating effective and relevant educational programs, to adhere to a student-centered approach.

The search for the principles of an effective and loyal way of ensuring the quality of education and all its components for educators is currently in the centre of research attention (Giones, 2019; Dolan, 2019). Internal assurance of the quality of education and its successful transformations involve determining the number of tasks successfully completed by the institution, the implementation of the educational goal and compliance with the development strategy of the higher educational institution. In the modern context, university education should be concerned not so much with the amount of knowledge offered to education seekers, but also with the assessment of one's own achievements, which is given by all participants in the educational process and controlling external bodies.

#### 1.1 Aims

The purpose of the research lies in establishing the principles of ensuring the quality of the educational program, which should be applied to achieve high quality teaching following the educational program of higher educational institutions in Ukraine; determining the shortcomings and prospects for the development of educational programs (curricula) and their assessment by educators.

In order to achieve the purpose outlined, the following tasks should be completed, namely:

- to determine the factors ensuring the success of the EP;
- to identify problematic positions and principles of development of internal quality assurance of the EP;
- to determine the assessment of the educational process regarding implementing the principles of quality assurance of the EP by the participants;
- to reveal the shortcomings and benefits of the model of providing the educational program.

# 2. Literature Review

In accredited higher educational institutions, internal quality assurance of education plays one of the leading roles as a fulfillment of one of the requirements of the national accreditation body (NAQA), as well as the actual aspiration of all participants in the educational process. Consideration and analysis of procedures related to quality assurance were problematic issues. These are procedures for assessing and measuring the quality and effectiveness of teaching based on the program and learning objectives. Many scientific studies have criticized the length, complexity, and bureaucratization of such processes (Seyfried & Pohlenz, 2018). The investigators note that the scientific and pedagogical staff and administration take into account and use the procedures related to ensuring the quality of education, but a large percentage of employees consider this to be exhausting additional work (Chaudhary & Dey, 2021). Studies of employees' attitude towards accreditation have shown that numerous assessments and presentations, the need to collect evidence for submission for accreditation, which are a requirement of regulatory bodies, are time-consuming (Brookfield, 2017). The scholars have also noted that the efforts on creating EP and compiling a package of documents for it is a type of work that takes time that has been previously used for methodical development, reflection and work on improving teaching methods, that is, everything that should support high quality of education, achievement of high quality in education and improvement of pedagogical skills. In modern science, there are many studies that consider ways to improve the quality of education and educational programs, namely: improving the quality of educational practice (Anane & Addaney, 2016); improving the content of educational programs and improving the skills of the teaching staff (Bollaert, 2014; Tanberg & Martin, 2019). However, the consideration of the improvement of pedagogical practices and methodological skills remains beyond the scope of this plentiful research experience. The research aim outlined is also considered in the presented academic paper. Some studies (Hariri, 2021; Lytvynenko et al., 2022) have considered ways to ensure and improve pedagogical practices; experiences related to ensuring the quality of education and implemented in private higher educational institutions were studied.

It is important to form a system for ensuring control over the internal quality system of EP. The studies of models of control over the quality of the educational process are theoretical explorations (Guerrero, at al., 2019) and practical recommendations (Etzkowitz, 2019). A search was conducted and the system of terms used in educational programs was updated, as well as consideration of effective decision-making algorithms was carried out (Cheng, 2018; Rybnicek, at al., 2019).

The conducted studies point out to the fact that the content of the evaluation of the educational program is based on taking into account the general human component and the effectiveness of education itself (O'Sullivan, 2017; Yuzkiv et al., 2020; Slipchuk V., et al., 2021).

Philosophical fundamentals of higher education development, their connections with management actions and quality of educational services, labour market requirements and level of education, satisfaction of all participants in the educational process are considered (Flek & Prince, 2014; Khalil, 2021). In a number of scientific studies, an algorithm for internal quality assurance of the educational program is proposed (Asadi, et al., 2016); consequently, university education should take into account students' assessment of the quality of skills and abilities acquired in the process of training.

#### 3. Methods

The experiment's methodology was based on a system approach. Conducting a research experiment has required the use of a set of methods as follows: empirical (diagnostic) methods, questionnaire methods (written form) and observation. The implementation of the pedagogical experiment required using statistical analysis tools. All research operations were carried out for the purpose of collecting, investigating and analyzing the data collected on the project. The data were also analyzed using content and thematic analysis. Content analysis made it possible to measure the respondents' social actions (their verbal form) through the experiment's participants' activities and results, and not only according to their thoughts and standpoints. The descriptive method, analysis and synthesis were used to work with the theoretical and methodological base of the research.

The research experiment was conducted during the 1st semester of the 2021 - 2022 academic year in a number of universities of Ukraine, namely: Simon Kuznets Kharkiv National University of Economics, Zaporizhzhia National University. Representatives of deans' offices (methodologists), employees (laboratory technicians) and teachers of departments (12 persons) took part in the research project. That is, qualitative interpretive studies, questionnaires and surveys taken from 12 respondents were used in the research. The sample was collected deliberately and consisted of 4 methodologists, 2 laboratory assistants (employees of the department), and 6 teachers (one also part-time performs the duties of deputy dean).

The survey of respondents was carried out using Google Drive forms. In the context of conducting the present experiment, experience similar to the explorations carried out in this project was taken into account, the main positions of this methodology were used. Taking into account the conditions, context and main locations of the implementation of the experiment, the features of internal quality assurance of EP at universities and the conditions for the introduction of innovations, the attitude of the establishment's employees to such measures were considered.

The experiment was conducted in III stages. At I (preparatory) stage, the research group prepared a corpus of questionnaires. They were compiled with the aim of implementing the research goal, adapted to the professional features of the administration workers, the scientific and pedagogical staff of educational institutions. The survey of respondents was conducted in compliance with the rules of privacy; all participants of the experiment gave written consent for voluntary participation in it after the interviews conducted by the researchers. At this stage, gender, demographic and professional indicators have been established.

At II stage of the research, a survey of respondents was conducted regarding problematic issues in the development of internal quality assurance of the EP. In parallel with that, work is carried out according to the developed algorithm in order to ensure the quality of the EP and compile a package of documents that ensure and certify the implementation of the educational program.

At III (final) stage of the experiment, surveys were conducted; the level of assessment of problematic issues and positive points in the field of quality assurance of EP, as well as assessment of the implementation of the principles of quality assurance of EP was established.

From among the difficulties and shortcomings of the project, the following ones should be mentioned, namely: the research group takes a passive standpoint of the observer; it is not possible to identify the reasons for respondents' opinions and their changes; due to the lack of an opportunity to conduct an in-depth qualitative study; the experiment takes quite a lot of time.

#### 4. Results

Ideas about the academic quality of EP and the implementation of these ideas in the process of forming and applying the basic principles of creating a quality educational product in practice are significant issues. Internal quality assurance of the educational program should take into consideration a number of parameters that allow fulfilling internal quality assurance of the educational program in university education.

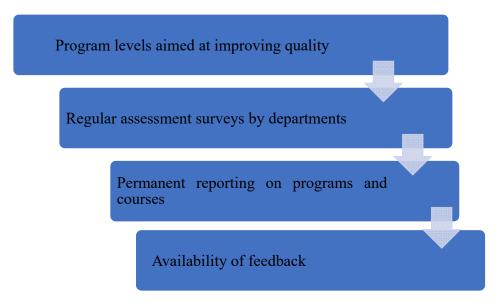


Figure 1. Factors Ensuring the Success of EP

The factors and principles of improving quality assurance of EP in higher educational institutions to a great extent depend on the coordinated actions of the entire team; consequently, the administration and teaching staff, together with the student body and stakeholders, should be fully committed to the management and organization of internal quality assurance of educational programs. In addition, everyone should be prepared for permanent improvement, which

should be based on the program's strong points. From among the factors and conditions for the success of educational programs, the following ones should be identified, namely: the focus of all program components on improving the quality of education; all administrative departments should regularly report on the development of the courses and educational programs they represent; all departments should conduct and analyse evaluation surveys and expert observations on a regular basis. Constant feedback should be established with all interested parties in the formation of the EP (graduates, employees, employers); it is about work on the formation of an evidentiary source for making the relevant decisions during the processes of quality assurance and improvement.

At I stage, a preliminary survey and a questionnaire was organized for all those willing to participate in the research experiment; those persons, who expressed a desire to continue the experiment, became participants in further actions. Previously, our group received permission from the universities' administrations and signed an agreement with the administrations and the respondents.

Foremost, the demographic, professional and gender indicators of the participants of the experiment were determined.

As it can be observed from the survey, the representatives of the universities participating in ensuring the internal quality of the educational program are experienced employees, where the laboratory assistant has the least work experience on the position - 4 years, and the docents of the department have the most work experience - 21 years and 20 years, respectively. All employees and managers of the university, participating in the project, work in department training popular specialties among students; these are large units and prestigious departments. At II stage, a survey was conducted regarding the assessment of the main contents, principles and goals of internal quality assurance of EP in higher educational institutions. The results are represented in percentages.

**Table 1.** Personal and Professional Indicators of Respondents (author's development)

№	Position	Office	Faculty	Work experience
1	Methodist	Dean's Office	Economics and law (Kharkiv)	8
2	Docent	Department	Economics and law (Kharkiv)	15
3	Methodist	Dean's Office	Economic (Zaporizhzhia)	11
4	Docent	Department	International relations (Kharkiv)	20
5	Senior Lecturer	Department	International relations (Kharkiv)	5
6	Laboratory assistant	Department	Journalism (Zaporizhia)	4
7	Senior Lecturer	Department	Journalism (Zaporizhia)	6
8	Deputy Dean	Dean's Office	Economics and law (Kharkiv)	11
9	Docent	Department	Economic (Zaporizhzhia)	21
10	Methodist	Dean's Office	International relations (Kharkiv)	5
11	Methodist	Dean's Office	Economic (Zaporizhzhia)	12
12	Docent	Department	Economic (Zaporizhzhia)	16

According to the results of the surveys conducted, the internal support of EP, based on the respondents' assessments, primarily requires teamwork (67%); the method of ensuring the quality of EP was also named as an important component of the success of the program. They have not decided whether there are educational practices without which it is impossible to ensure the quality of the EP (52%). This indicator points out to the fact that the participants working on the educational program do not attach sufficient importance to the practical components in the development of their specialty.

At III (final) stage, after the formation, amendments and quality improvements of educational programs, a survey was conducted regarding the assessment of new materials in the EP quality assurance process by participants. The results are represented in percentages.

Table 2. Problematic Issues Regarding the Development of Internal Quality Assurance of EP (author's development)

No	Problem	Yes	No	I can't say
1	Educational services are insufficient	37	40	23
2	Is it necessary to evaluate the EP according to academic quality parameters?	32	20	48
3	It is important to take into account the method of ensuring the quality of the EP	59	7	34
4	It is necessary to constantly improve the methods of ensuring the quality of the EP	25	31	44
5	Are there educational practices that should be avoided?	45	5	50
6	Are there educational practices without which it is impossible to ensure the quality of the EP?	40	8	52
7	High-quality provision of the EP requires teamwork	67	23	10

In general, the number of positive assessments regarding the introduction of qualitative changes in the educational program, that is, its internal support, indicates a positive attitude towards the process of forming high-quality education. The number of positive evaluations is on average 50%. The most positive assessment was given to the compliance of the EP with European quality standards and the level of development of educational spaces for students to work - 60%; qualification of the educational and pedagogical staff of the EP - 65%. This gives evidence of the proper work in the field of forming a positive image of the university and orientation to the high qualification of the training staff.

**Table 3.** Assessment of the Implementation of the Principles of Quality Assurance of EP (author's development)

№	Question	Yes	No	I don't know
1	Does the proposed EP correspond to the goals of the university?	55	30	25
2	Do all the courses offered in the EP correspond to the university's development strategy?		50	25
3	Does the OP meet European quality standards?	60	20	20
4	Did the unit use all available resources to improve the quality of the EP?	35	30	35
5	Are laboratories, co-working spaces and libraries developing for the implementation of the EP?	60	20	20
6	Does the educational and pedagogical staff of the EP have the necessary qualifications, experience, and positive attitude towards students?	65	25	10

At the final stage, a survey of respondents was also conducted regarding their identification of weaknesses and strong points in the internal provision of EP, which were revealed during the formation of educational programs. The participants of the experiment had to determine from the represented list the most relevant problems and positive positions for them. Therefore, a rating of 4 positions was formed (each position scored more than 25% of respondents).

**Table 4.** Disadvantages of the Model of EP Provision and Positive Positions (author's development)

№	Shortcomings	Strong points
1	Formal creation of an internal quality management system	A new academic space is being formed
2	External pressure causes change more than appears as an internal need	The volume, quality and objectivity of information provided to potential clients and partners shapes the image of the university
3	Unification of the model of quality assurance systems through comparison with other higher educational institutions	Transition to mixed forms of education, organization of methodological support for independent and distance work, care for participants in the educational process
4	The websites of universities are overloaded with information about various events within the higher educational institution, they resemble a site with announcements	The involvement of external experts in the process of evaluating the quality of education; this gives the opportunity for innovators to reasonably advocate for changes

As the results of the survey show, the balancedness of the EP is an important component of its success. According to the participants' assessments, the quality of the educational program is ensured through the creation of a democratic atmosphere in the academic space. An important component of the quality of the EP is also fierce competition and external influences – this is precisely why the transition to mixed forms of education, caused by the pandemic and quarantine restrictions, has become necessary. Bureaucracy, lack of creativity and awareness of modern technologies were named among the significant difficulties in the formation of a high-quality EP. Teachers and administrators also consider the excessive burden on all participants of the process to be an important drawback of the modern process of creating EP.

#### 5. Discussion

In a number of studies, a research position is presented regarding the need for constant reforming of the fundamentals of university education, which is a mandatory component to ensure the quality of EP (Kuzmina, at al., 2020); such actions are dictated by the need to solve a complex of problems at both national and global levels (Chaudhary, Dey, 2021). Our research also represents the standpoints as follows: educators' awareness of the necessity to meet European standards, to form educational and methodological complexes for the introduction of forms of mixed education, to work on creating a positive image of the university.

In the study of Hariri (2021), the practices of ensuring the quality of academic education were studied; it was recommended to take into account the need to work on the excellence of teaching, the professional competencies of the teacher. The necessity of university management's support for ensuring high quality of teaching has been determined. Pedagogical practices being formed in the academic environment have been presented according to the classification as follows: practices that should be added; practices that are mandatory; practices that should be avoided; practices that should be changed. Based on our studies' results, from among the positive aspects, the participants involved in the creation and implementation of educational programs have identified the creation of a new academic space and the transition to blended forms of education as a relatively new educational practice that has required the organization of methodical provision of independent and remote work. In our opinion, the problems of significant financial costs on ensuring the smooth functioning of mixed education belong to the standpoint that needs to be changed. Not every university administration was ready for changes in the educational paradigm, as well as large costs. This problem requires further consideration, systematic scientific and explanatory work in the pedagogical community.

The investigators (Hsu, et al., 2016) in the field of performance analysis and educational quality control models have identified the importance of the educational context, teaching and didactic materials, learning outcomes and a student-centered approach. They have come to the conclusion that modern educational quality assurance models (IPP, Input, Process and Product) are effective forasmuch as they are applied to improve comprehensive quality assessment (Scherman & Bosker, 2017). In the course of our research, a complex and step-by-step approach to the implementation of internal quality assurance of the EP has turned out to be effective and efficient; it was quite positively assessed by the group of respondents of the institution (50%), where the priorities were the compliance of the EP with European quality standards and the level of development of learning spaces for student work (60%). A problematic place in studies of this type is the experiment's insufficient duration and the impossibility of conducting in-depth interviews in order to understand the causes and consequences of changes in assessing attitudes towards software tools for measuring the quality of education. We consider it is worth continuing the constant work on developing effective means of measuring the education quality in rapidly changing civilizational conditions, making this process long and complex.

In order to achieve a general high level of quality of university education in the presence of limited resources and products, it is worth working on improving the supply of educational programs with missing and relevant positions, improving the management of internal resources and focusing on meeting current educational needs. This should be the subject of further investigations and experimental research projects.

### 6. Conclusion

Each educational institution should choose the most suitable programs, taking into accounts its features, from the models of internal quality assurance of the EP. The principal tools of internal support are as follows: the orientation of all EP components towards improving the quality of education; organization of regular reporting on development trends in educational programs of the institution; regular and broad assessment and expert observations of the opinion and preferences of all participants in education; constant feedback with all interested parties in ensuring the quality of EP (graduates, employees, employers). Increasing attention to the practices of internal quality assurance of EP at the

HEIs on the part of the teaching staff and administration of institutions is the reason for the activation of the quality, modernity and relevance of the level of skill and methodological proficiency of teachers. Professional burnout is a big danger in such processes. However, the increase in competition in the market of educational services, the large number of higher educational institutions wishing to obtain accreditation push forward toward continuous improvement of the quality of educational institutions. Educational policies, accreditation bodies and management of educational institutions should constantly improve and reform current practices for ensuring the quality of education.

In the future research perspective, particular attention should be paid towards searching for those universal principles and models of internal quality assurance of the educational program aimed at improving the quality of teaching, increasing the creativity of pedagogical work, achieving excellence in teaching practices, promoting the academic freedom of teachers and free choice of students.

# References

- Aburizaizah, S. (2021). Higher education in Saudi Arabia: Rooted in bureaucracy, inspired by an EFL semi-decentralization model, *International Journal of English Language Education*, 9, 1. https://doi.org/10.5296/ijele.v9i1.17941
- A-Maawali, W., & Al-Siyabi, M. (2020). Impact of quality assurance on quality teaching among teachers in Oman higher education. *Education Quarterly Reviews*, *3*(3), 334-350. http://doi.org/10.301014/aior.1993.03.03.144
- Anane, G. K., & Addaney, A. (2016). Managing quality assurance in higher education: The case of the university of energy and natural resources, Ghana. *Journal of Education and Practice*, 7(22), 4-46.
- Asadi, M., Reza, G., Akbari, R., & Ghafar, R. (2016). Program evaluation of the New English Textbook (prospect 1) in the Iranian Ministry of Education. *Theory and Practice in Language Studies*, 6(2), 291-301. http://dx.doi.org/10.17507/ tpls.0602.10
- Slipchuk, V., Yuzkiv, H., Batechko, N., Pisotska, M., & Klymenko, L. (2021). Academic Mobility Development among University Students during COVID-19 Pandemic. *International Journal of Health Sciences*, *5*(3), 573-583. https://doi.org/10.53730/ijhs.v5n3.2490573
- Bollaert, L. (2014). A manual for internal quality assurance (IQA) in higher education (HA): With special focus on Profissional Higher Education (PHE). 9<sup>th</sup> EQAF Barcelona. Parallel Plenary Session 1, EURASHE.
- Brookfield, S. D. (2017). Becoming a critically reflective teacher (2nd ed.). Jossey-Bas.
- Centobelli, P., Cerchione, R., Esposito, E., & Shashi, S. (2019). The mediating role of knowledge exploration and exploitation for the development of an entrepreneurial university. *Management Decision*, *57*(12), 3301-3320. https://doi.org/10.1108/MD-11-2018-1240
- Chaudhary, S., & Dey, A. (2021). Influence of student-perceived service quality on sustainability practices of university and student satisfaction. *Quality Assurance in Education*, 29(1), 29-40. https://doi.org/10.1108/QAE-10-2019-0107
- Cheng, L. (2018). Teaching model reform of performance management course based on the theory of constructivism. *Open Journal of Business and Management*, 6, 651-657. https://doi.org/10.4236/ojbm.2018.63049
- Dolan, B., Cunningham, J. A., Menter, M., & McGregor, C. (2019). The role and function of cooperative research centres in entrepreneurial universities: a micro level perspective. *Management Decision*, *57*(12), 3406-3425. https://doi.org/10.1108/MD-10-2018-1172
- Etzkowitz, H., Germain-Alamartine, E., Keel, J., Kumar, C., Smith, K., & Albats, E. (2019). Entrepreneurial university dynamics: structured ambivalence, relative deprivation and institution-formation in the Stanford innovation system. *Technological Forecasting and Social Change*, 141, 159-171. https://doi.org/10.1016/j.techfore.2018.10.019
- Flek, R., & Prince, T. (2014). Developing and Teaching an Honors Calculus Course in a Community College. *Hispanic Educational Technology Services Online Journal*, IV. Retrieved from http://hets.org/ejournal/2014/07/19/developing-and-teaching-an-honors-calculus-course-in-a-community-colleg e/
- Giones, F. (2019). University-industry collaborations: an industry perspective. *Management Decision*, 57(12), 3258-3279. https://doi.org/10.1108/MD-11-2018-1182

- Guerrero, M., Herrera, F., & Urbano, D. (2019). Strategic knowledge management within subsidised entrepreneurial university-industry partnerships. *Management Decision*, 57(12), 3280-3300. https://doi.org/10.1108/MD-10-2018-1126
- Hariri, R. (2021). Let Me Enjoy Teaching" Improving Academic Quality Assurance Practices to Attain Teaching Excellence: Case Study of Selected Private Higher Education Institutions in the Kingdom of Saudi Arabia Randa International *Journal of Learning, Teaching and Educational Research*, 20(11), 237-254. https://doi.org/10.26803/ijlter.20.11.13
- Hsu, S., Wang, Y., Cheng, C., & Chen, Y. (2016). Developing a decomposed alumni satisfaction model for higher education institutions *Total Quality Management & Business Excellence*, 27(9-10), 979-996. https://doi.org/10.1080/14783363.2015.1054102
- Khalil, M. (2021). Responsiveness to quality assurance implementation: an institutional theory perspective. *Quality Assurance in Education*, 29(1), 41-52. https://doi.org/10.1108/QAE-06-2020-0074
- Kuzmina, M., Protas, O., Fartushok, T., Raievska, Y., Ivanova, I. (2020). Formation of Students' Competence of Tertiary Educational Institutions by Practical Training Aids *International Journal of Higher Education*, 9(7), 279-288. https://doi.org/10.5430/ijhe.v9n7p279
- Lytvynenko, N., Yuzkiv, H., Yanchytska, K., Nikolaieva, O., & Batchenko, L. (2022). Modern Learning Models through Teacher and Student Dynamic Interaction in HEI towards COVID-19 Pandemic Condition. *International Journal of Health Sciences*, 6(1), 234-243. https://doi.org/10.53730/ijhs.v6n1.3870234
- O'Sullivan, D. (2017). Evolution of internal quality assurance at one university a case study, *Quality Assurance in Education*, 25(2), 189-205. https://doi.org/10.1108/QAE-03-2016-0011
- Ricci, R., Colombelli, A., & Paolucci, E. (2019). Entrepreneurial activities and models of advanced European science and technology universities. *Management Decision*, 57(12), 3447-3472. https://doi.org/10.1108/MD-11-2018-1237
- Rybnicek, R., Leitner, K.-H., Baumgartner, L., & Plakolm, J. (2019). Industry and leadership experiences of the heads of departments and their impact on the performance of public universities. *Management Decision*, 57(12), 3321-3345. https://doi.org/10.1108/MD-10-2018-1173
- Scherman, V., & Bosker, R. (2017). The Role of Monitoring in Enhancing the Quality of Education. In: Scherman V., Bosker R.J., Howie S.J. (Eds.), *Monitoring the Quality of Education in Schools*, Sense Publishers, Rotterdam. https://doi.org/10.1007/978-94-6300-453-4 1
- Seyfried, M., & Pohlenz, P. (2018). Assessing quality assurance in higher education: Quality managers' perceptions of effectivness. *European Journal of Higher Education*, 8(3), 258-271. https://doi.org/10.10/80/21568235.2018.1474777
- Tandberg, D. A., & Martin, R. R. (2019). Quality assurance and improvement in higher education: The role of the states. *The State Higher Education Executive Officers Association* (SHEEO). Retrieved from URL https://sheeo.org/wpcontent/up;oads/2019/05/SHEEO Qualityassurance.pdf
- UNESCO. (2014). EFA Global Monitoring Report 2013/4. Teaching and learning: Achieving quality for all. *Education for All Global Monitoring Report 2013–2014*.
- Yuzkiv, H., Ivanenko, I., Marchenko, N., Kosharna, N., & Medvid, N. (2020). Innovative Methods in Language Disciplines during Profile Training Implementation. *International Journal of Higher Education*, 9(7), 230-242.
- Slipchuk, V., Yuzkiv, H., Lutaieva, T., Batechko, N., & Pisotska, M. (2021). Pedagogical Skills and Communicative Competence of University Teachers during the Classes. *Review of International Geographical Education (RIGEO)*, 11(4), 1226-1237. https://doi.org/10.48047/rigeo

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