

“A guarantor in the quality management system of educational programs: a case of Ukrainian universities”

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A GUARANTOR IN THE QUALITY MANAGEMENT SYSTEM OF EDUCATIONAL PROGRAMS: A CASE OF UKRAINIAN UNIVERSITIES

Abstract

Development of the system of ensuring quality in higher education of Ukraine grounded the creation of such management subject as a guarantor of the educational program. However, a formal understanding of the role and uncertainty of the guarantor's status in the contemporary area of managing higher education institutions became the widespread consequence of those innovations. Considering the stated above, various models of managing the quality of educational programs with the help of the guarantor have been developed in the research, and conditions for efficient application of such models in Ukrainian universities have been grounded. The research is based on the application of the strategic analysis method GAP for identifying issues and features of organizing management in systems of internal quality assurance in universities, and methods of modeling and graphical analysis method for creating alternative management systems in educational programs with and without such professional educational-scientific structural subdivisions as departments. As a result, the developed models include the rational organization of management of educational programs under the conditions of centralized and decentralized systems of internal educational quality assurance provision. For instance, it could create favorable conditions for decreasing bureaucracy and repetition of functions in the management system of universities and lead to the realization of the individual potential of guarantors as managers-experts in educational programs.

Keywords

accreditation, administration, approach, classification, department, expert, higher education, model, motivation, process

JEL Classification

I23, M12, M14

INTRODUCTION

Transformation of higher education in most post-Soviet countries requires the changes in approaches to managing internal quality assurance of educational programs. This issue becomes most acute under conditions of creation of university autonomies, while the latter remain in state ownership. Deregulation and decentralization of management in such education institutions is unavoidable; however, it often requires alternative individual models of implementation. Such models must consider features of the mission and strategy of a certain university. Along with that, both the mission and the strategy cannot ignore the general national trend in higher education development. First of all, it concerns the focus of the state policy on standards and recommendations of quality assurance in higher education of the European Union and the new paradigm of the accreditation of educational programs. Within this context, the issue of improving low-efficacy bureaucratic models of management in post-Soviet universities, which have already acquired significant rights on autonomy, remains actual.

Besides, the approaches to quality management of educational programs in Ukrainian universities have positive and negative aspects. Moreover, the latter is usually grounded on previous higher education trends, which always work efficiently in new conditions. Furthermore, there is no one position on improving the system of university management both in the experimental and the research environment. Moreover, there is an insufficient scientific and organizational-methodological provision of the modernization in the system of higher education management under the conditions of post-Soviet transformation. All the mentioned above stresses the importance of further research in this direction.

1. LITERATURE REVIEW

The process of organizing efficient management of the educational program quality is the subject of many contemporary studies. Within this context, management in the national system of higher education has similar characteristics with world trends and many internal features of the evolutionary transformation. Under such conditions, the implementation of innovations must be carried out considering the behavioral approach (Adizes, 2017). Moreover, the managerial strategy should correspond to corporate management principles (Kanadli, 2020) and a synergic approach to creating solutions (Khalatur et al., 2020). Moreover, Sardak and Samoylenko (2014) testify to the importance of intellectual development in organizational structures. In contrast, Vasylieva (2019) stresses the actuality of considering functional and comparative approaches to projecting a managerial system in a certain sphere of activity.

Nelipa et al. (2018) pay attention to the importance of minimizing the influence of the Soviet legacy on universities and new amendments to it, which were created during the first post-Soviet years. These researchers believe that young educational managers with little experience will cause less harm by keeping innovations than the more experienced ones who try to keep status-quo and cause open or hidden resistance to changes. Therefore, the realities of Ukrainian universities show that the change of generations is an unavoidable condition for successful transformation.

Stensaker et al. (2019) studied individual features of building a modern internal system of quality management at the level of certain educational programs of the university. The importance of debureaucratization in administrative approaches and implementation of academic management principles in such systems became the subject

of attention by Maassen et al. (2019), Shin et al. (2018), Weaver et al. (2008), and Kolsaker (2008). Their conclusions are focused on increasing the level of management flexibility in the universities.

However, Vican et al. (2019) found out that the academic level of management in the university often appeals to the inconsistency between their professional qualifications and corporate logic, which administrators apply.

Konina and Nanetadze (2018) focus on the issues and prospects of implementing the process approach in universities with post-Soviet management traditions. The scientists concluded that business processes are typically either not formed or are of a formal type. The solution to the issue is viewed as creating entrepreneurial universities via an increase in the economic independence of state higher education institutions and the spread of the network of private universities. Nevertheless, Atkins (2019) and Rudenko et al. (2018) studied the issues of implementing the project approach in the universities. They developed recommendations that maintain the process of managing projects and strategic planning in quality assurance.

Modernization of the management structures is relevant for many European universities. For instance, Gornitzka et al. (2017) analyzed the latest changes by the level of centralizing the authorities on making decisions and concentration of authorities on key positions. Within this context, Mosey et al. (2012) studied the ways of transforming conventional university structures via interdisciplinary institutions, while Donina and Hasanefendic (2018), as well as Kwiek et al. (2008), studied the influence of academic entrepreneurship on changes in the institutional management in European universities.

The positive influence of accreditation in educational programs on quality assurance has been proven

by Chehrzad et al. (2019), Stensaker (2011), and Murray (2004). Roland (2011) developed the model of organizational efficacy based on the self-evaluation matrix (criteria of Baldrige, competitive value frames, and purpose) to increase the conformity of the university to accreditation standards.

The activity of the guarantor toward quality management of educational programs can also be tracked in certain researches. Thus, Jibeen and Khan (2015) point to its importance in the internationalization of higher education and improvement of its academic quality. In contrast, Hrnčiar and Madžík (2013) describe the role of the guarantor of the educational program in the implementation of the model developed by them for determining the parties concerned inside the education institution (university) and in the external environment (clients).

However, these researches lack distinct identification of models of educational programs quality management with the attraction of professional educational-scientific structural subdivisions (departments). The features of symbiosis at administrative and academic management in the internal system of quality assurance in universities have been studied insufficiently. Further development of alternative models of guarantor's involvement as a subject of educational programs management under the conditions of evolutionary transformation in the national higher education system is required.

2. AIMS

The research aims to develop various models for managing the assurance of educational programs quality with the participation of a guarantor and determine the conditions for efficient implementation of those models in the activity of higher education institutions in Ukraine. To achieve the set purpose, it is necessary to resolve the following objectives:

- 1) provide the classification of main models for quality assurance management of educational programs with the inclusion of professional scientific-educational structural subdivisions (departments);
- 2) build up a combined linear-administrative quality assurance management model for educational programs with one specialization;
- 3) create the matrix model of managing quality in higher education;
- 4) develop the model of administrative and academic management in educational programs based on the process approach;
- 5) model the structure of quality assurance of educational programs without the creation of professional educational-scientific structural subdivisions (departments);
- 6) ground the features of implementing the models of managing programs under the conditions of centralized and decentralized systems of internal quality assurance of education in the universities.

3. METHODS

The methodology of the research is based on the praxeological approach, as well as the process (Biesta, 2015), systematic, and situational approaches to the general management theory (Rassokha & Iskhakov, 2017). The research is grounded on rationalistic logistics ideas (O. Velychko & L. Velychko, 2017) and providing logistics (Velychko, 2014) in the management system.

The peculiarities of credentials and duties of guarantors in the internal quality provision system in different types of institutions have been studied at the first stage of the research. Materials for the research were the reports of the National Agency for Higher Education Quality Assurance (Ukraine) on carrying out accreditation expertise of the educational programs during 2019–2020 at all levels of higher education (Bachelor, Master, Ph.D.) in the institutions of all types (National University “Kyiv-Mohyla Academy”, Ivan Franko National University of Lviv, Mariupol State University, Lviv University of Trade and Economics, National University of Ukraine on Physical Education and Sport, Ukrainian Engineering-Pedagogical Academy, Vinnytsia Trade and Economics

Institute of Kyiv National University of Trade and Economics, Galician College named after Viacheslav Chornovil). Moreover, the conclusions of the industry expert councils on organizing the internal quality assurance of educational programs in 28 Ukrainian universities were taken into account (National Agency for Higher Education Quality Assurance of Ukraine, 2020a)..

Generalization of the experience enabled to systematize and describe the classification of the practically widespread management structures with the participation of guarantors. The studied management models generally were identified as linear-bureaucratic. Moreover, their typical differences were detailed. All the above enabled the authors to ground the knowledge at the empiric level, which can be obtained directly from the experience with certain rationalistic processing of the object under study. The research models, such as observation, expert evaluation, description, and modeling, were used in that stage.

In the second stage, prospective ways of implementing adaptive management structures and their features in the system of management of quality at universities were outlined. Subsequently, it promoted focus on the effort of creating the mechanism of implementing the matrix quality management model with the guarantor's participation and the development of the model of administrative and academic management of an educational program based on the process approach. At the final stage of the research, conditions for modeling the prospective structure of quality assurance of educational programs without the inclusion of professional educational-scientific departments were created. All that enabled to theoretically ground the knowledge, which can be obtained by abstract thinking. Abstraction, generalization, classification, and idealization were used in the second stage.

In parallel at each stage, grounding of features, restrictions, and conditions for implementing models of managing programs under the conditions of centralized and decentralized systems of internal quality assurance provision was carried out. Moreover, at all stages of the research, specialized methods were used: graphic design method (at creating variable management systems of educational programs with and without departments);

strategic analysis GAP (Mineraud et al., 2016) (at determining features and weaknesses in organization of management over the internal provision of quality assurance for educational programs in higher education institutions).

4. RESULTS AND DISCUSSION

The process of higher education reforming in Ukraine based on the European approaches and practices promoted the transition of the main focus of quality assurance systems from majors to educational programs. At the same time, it promoted the appearance of such a primary management subject as a guarantor. However, the spread phenomenon in the organizational structure and management system in post-Soviet countries' universities remains such a primary structural division and a management chain as a department. In many cases, the innovations led to the appearance of unreasonable tasks, duplicating functions, and special uncertainty of the guarantor's role in the modern environment of universities' management. Moreover, the new management assurance system often contradicts conventional approaches.

According to the Ukrainian legislation, a department is a basic structural subdivision of higher education that provides educational and methodological activity on one or several majors or scientific disciplines and provides scientific-research work in a certain direction (The Verkhovna Rada of Ukraine, 2014). In the research process, the classification of the main quality assurance management models of educational programs has been suggested with the inclusion of special educational-scientific structural subdivisions (departments) (Figure 1).

Overall, the models have been divided into two types: linear-administrative and adaptive. The former is closer in a sense to bureaucratic (mechanistic) structures of management, the latter – to the organic ones. The principle of rationalistic and providing logistics in the management system has been used as a basis for these models.

The approaches of the National Agency for Higher Education Quality Assurance have been considered; according to them, a guarantor of the educa-

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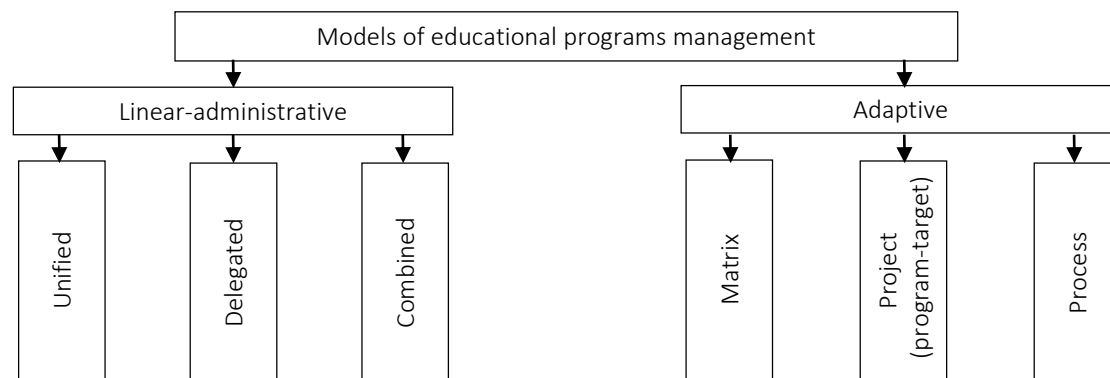


Figure 1. Classification of main quality assurance management models of educational programs with the inclusion of special educational-scientific structural subdivisions (departments)

tional program is a scientific-pedagogical or scientific worker who works at the main place of work, he/she is responsible for the quality of the educational program, has a scientific degree and/or an academic title in a similar major or the one close to the educational program, or related work experience in the field. Arrangements, rights, and obligations of the guarantor of the educational program are included in the autonomy of the higher education institution. This worker/workers can be a guarantor only in one educational program. The guarantor of the educational program can work in the corresponding department or in any other university division (National Agency for Higher Education Quality Assurance of Ukraine, 2020b).

As a result, modern features of internal quality assurance systems of Ukrainian higher education institutions of different types were studied (Dnipro State Agrarian and Economic University, Oles Honchar Dnipro National University, National University "Kyiv-Mohyla Academy", Ivan Franko National University of Lviv, Mariupol State University, Lviv University of Trade and Economics, National University of Ukraine on Physical Education and Sport, Ukrainian Engineering-Pedagogical Academy, Vinnytsia Trade and Economics Institute of Kyiv National University of Trade and Economics, Galician College named after Viacheslav Chornovil). This allowed to come to certain generalized conclusions.

More frequently, the guarantor as an academic manager works at the related department. In that case, it is possible to consider the given variants of

organizing the educational programs (EP) management. For example, the head of the profile department with a certain major is appointed as a guarantor. Therefore, there is a unification of the administrative and academic influence on the educational program from the same person (unified model). The less spread but possible variant is when the guarantor is appointed from scientific-pedagogical workers (SPW) of the department, whereas the department head retains only an administrative function. In such a model, there is a significant level of the linear administrative dependence of the head of the educational program from the head of the department (delegating model). However, it is not always manifested negatively from the position of the quality of education, but the risks of such influence are rather high. In reality, the temporary conjuncture at the market of educational services becomes more actual than the quality for the department. Besides, since the guarantor has no precise additional powers, he/she finds it very difficult to coordinate and provide the quality of many processes in practice. An example of that can be the consideration of the guarantor as an employee when he/she has to sign work programs in all scientific disciplines, and only then they will be discussed at the meeting of the department. Nonetheless, the guarantor must control the conformity of those documents to the educational program after offers from each department of the university, workers of which are involved in teaching at the educational program.

Certain attention should be paid to a combined linear-administrative model of managing educa-

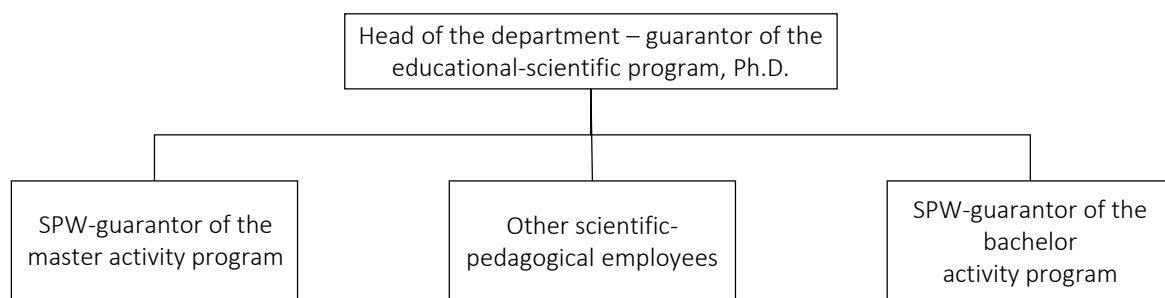


Figure 2. Combined linear-administrative model of quality assurance of educational programs by one major

tional programs by one major. It includes a combination of elements of the two previous models (Figure 2).

Figure 2 shows the most spread model, which has many positive characteristics. First of all, it is focused on the latest traditions in management organization, and therefore it is comprehensive and acceptable for most participants of the educational process. The model is focused on a high level of the centralization of management, which significantly promotes the unification and standardization of approaches to the organization of processes and the operative performance of the decisions. The presence of the EP guarantor of administrative powers (head of the department or another administrator) increases the possibility of influencing certain processes for providing quality assurance.

Along with that, such advantages can work in a negative context. Frequently the role of the SPW guarantor is rather formal, or he/she is quite limited in his/her powers. That is, the level of his/her real rights and responsibility for providing an educational program quality may not coincide with each other, which contradicts the laws and principles of management. Owing to significant administrative dependence of guarantors, key decisions on all educational programs for the major can be approved by the head of the department, or even higher-level managers. There are risks that in the list of mandatory and selective disciplines of EP, there may appear unreasonably limited and essential components, which go beyond the area of specialty. Thanks to that, a critically minimal bundle of fundamental disciplines or those form-

ing general professional competence or soft skills can be critically minimized. Moreover, from the selective bundle, students will have the possibility to choose only the main components provided by the department responsible for the major. A bundle of disciplines decided upon by the higher education institution (HEI) is not excluded. The motivation for revealing and considering the positions of stakeholders of EP becomes rather low. A certain mobilization of the quality may increase only during the period of external expertise. It will probably adversely affect the process of constant improvement in programs; however, it will increase the level of educational loading for department applicants or other subdivisions.

The research also focused on developing promising models for internal quality assurance systems in higher education in Ukrainian universities. The following category of models on educational program management typically more organically coincides with modern challenges in the system of HEI, in particular, such adaptive models as matrix, project (program-targeted), and process methods. Frequently they promote the implementation of a new paradigm of the quality in higher education and efficient implementation of contemporary legal, and regulatory support of the educational process.

The matrix model is interesting in this context. A prerequisite for its spread is the reconsideration by the National Agency for Higher Education Quality Assurance of the policy on the reluctance to be a guarantor in several programs. At least such exceptions could be made for the matrix models. Besides, it is completely supported by

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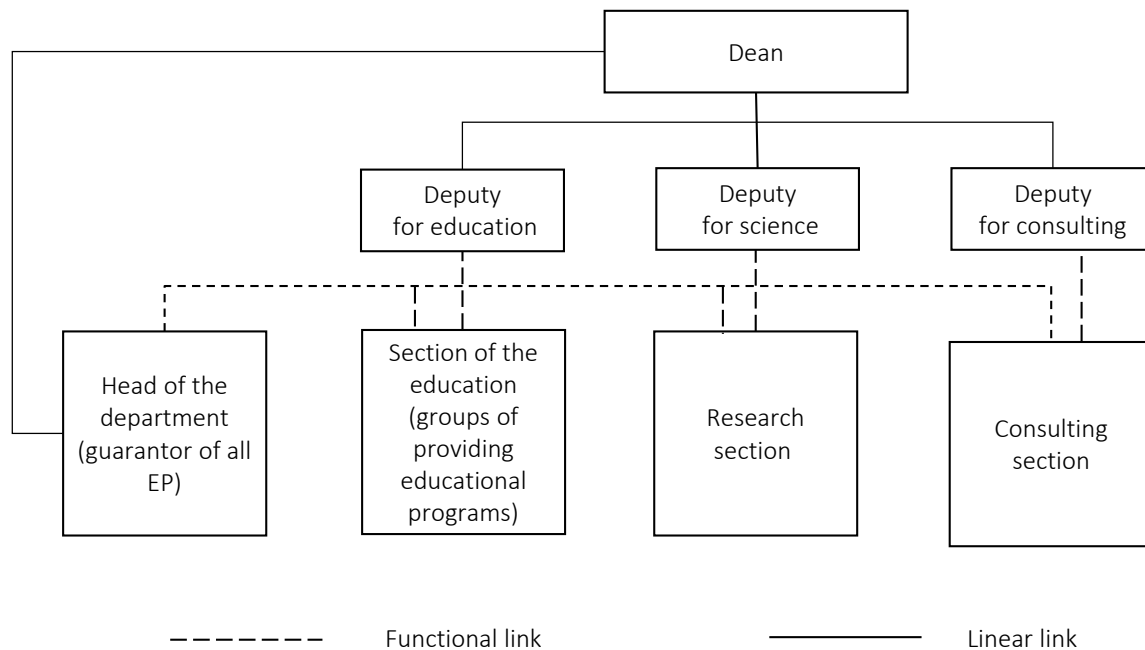


Figure 3. Scheme of the matrix model of quality assurance of educational programs

the norm of Licensing Conditions for Educational Activities (Cabinet of Ministers of Ukraine, 2015). In particular, in the current year, the head of the project group cannot, at the same time, manage other project groups except for managing project groups at different levels of higher education within one major in this higher education institution. Moreover, according to Provisions for Accreditation of Educational Programs, used for preparing applicants, the guarantor of the program can also be considered the head of the project group (Ministry of Education and Science of Ukraine, 2019). However, all of that is insufficient. The most essential to be done in a university is to carry out the transition from the system of linear (administrative) management to the model of academic control of the department from the side of the applicant.

Changes in the organization of the internal structure of the department are necessary for such a model. They should include educational, research, consulting, and other sections. In this case, the applicant will be focused on a high management level in all directions of work. He/she will provide only functional influence on employees in different sections and only on issues of their activity (academic management). Moreover, the profile deputies and the dean will also influence the sections of departments but

only in a functional way. However, this influence considers exclusively organizational and regulatory issues. It significantly unloads an applicant, releasing him/her from most administrative duties. In such a model, the head of the department can better focus on the content of education, research, and consulting, hence, better perform the role of the guarantor in all educational programs (Figure 3).

However, first of all, it concerns issues, which are connected to the actual content of the program, level of teaching, and so on. Other divisions of higher education institutions should efficiently provide the other essential educational program processes. Therefore, the range of responsibility of the guarantor in a certain educational program typically must be a bit smaller than in the case of other management models. However, an essential advantage is the deep professional specialization of the guarantor, its application at several programs at the same time. Moreover, most staff of the educational section, as a rule, can be included in the group of major provisions, which works in educational programs of the department.

Project and program-targeted models have a similar approach, but they can be better implemented for temporary educational projects of a university (social projects, professional training, and so on).

One of the prospective strategies of reforming the management of universities is the division between administrative and academic management in educational programs. Such an approach enables creating a flexible system of parallel management in the form of the process model. This system of the quality provision is focused on the criteria for evaluating the internal educational processes of the university. Consequently, there is an efficient implementation of the administrative and academic management based on the process approach. Therefore, it is reasonable to use the indicators of project efficiency considering ten criteria of Provisions for Accreditation of Educational Programs, which are used for preparing higher education applicants (Ministry of Education and Science of Ukraine, 2019). It is grounded by the fact that quality evaluation criteria by National Agencies for Higher Education Quality Assurance are focused on the following educational processes (K1-K10):

- 1) design of program aims;
- 2) development of the structure and content of the program;
- 3) formation of the access to the program and determination of the education results;
- 4) organization of education and teaching considering the program;
- 5) knowledge control, evaluation of higher education applicants and academic integrity;
- 6) provision of the program with human resources;
- 7) formation of the educational environment and material resources;
- 8) development and implementation of the system of quality assurance for programs;
- 9) creation of transparent and public procedures for qualitative functioning of programs;
- 10) organization of education via research.

It is reasonable to apply a model in which responsibilities and powers on administrative managing

educational programs should have such subjects as the department of internal quality provision, dean's office, and head of the department. University administration can also be included in the group. The main tasks of those subjects should include general regulation and control, organizational support, resource provision, administrative service, and so on. The process of academic management of educational programs must be provided by the guarantor and the project (work) group for developing (upgrading) an educational program. Some rights and duties can be delegated to teachers from the group, which provides the educational process. The authorities in the academic management system should create such conditions that there is the coordination of content processes in the education program. They include forming the structure and content of education, interaction with potential employers, surveying students and other stakeholders, including teachers, periodic renovation of disciplines, general management over content of education, and so on (see Figure 4).

Such a management model includes the procedure, which will create a significant alternative choice while selecting teachers for the education program, for instance, a certain profile department for two consecutive offered different specialists for teaching a certain discipline. However, according to the survey, each of them did not satisfy the expectations of most stakeholders for the content or quality of teaching. Under these conditions, the academic management subject (guarantor) can obtain powers necessary to attract academic staff for teaching a discipline from other subdivisions of the university as a part-time job or from other education institutions or scientific institutions as a part-time job. It is essential to create a procedure, which would provide greater public trust from the surveys, such as questioning stakeholders. An essential alternative for selecting the academic staff can be provided by open competition for teaching certain discipline and many other practices. Significant powers of the guarantor for the influence of politics are caused by his/her big amount of responsibility for the quality of education and teaching in this program. It also concerns the need for the real influence of the guarantor on all other processes of internal quality provision of the educational program. The extent of the influence of the guarantor will typically depend on features of

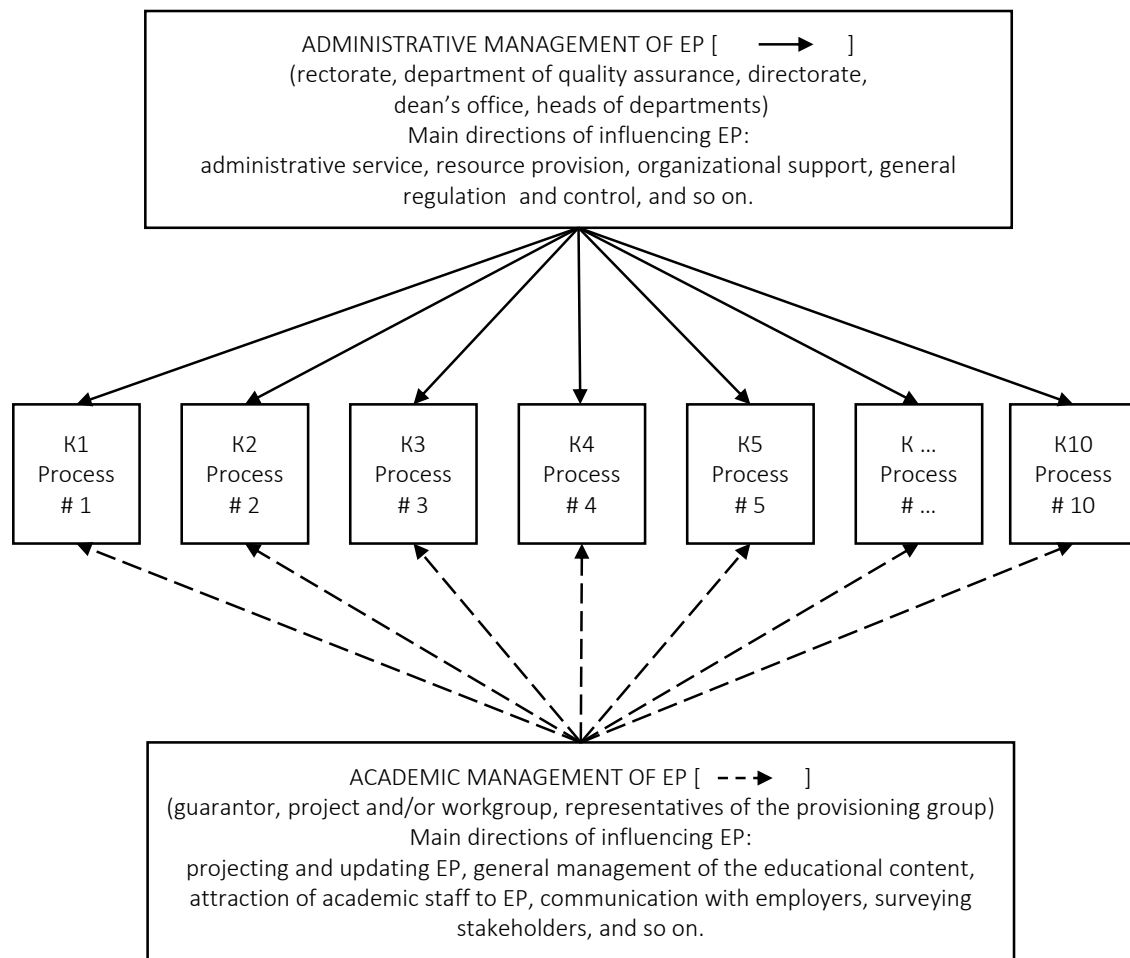


Figure 4. Model of organizing administrative and academic management of the educational program based on the process approach

each certain process. Moreover, it is essential to consider the extent of influence on such a process from administrative management.

If a guarantor is an academic manager only in one educational program, that is, as a rule, creates better conditions for efficient management. The advantage is caused by the bigger probability of maximizing attention and effort by the head of the program on providing the qualitative program implementation. Typically, the guarantor should have the necessary powers to select and utilize different tools for ensuring quality. Specific features of each educational program cause it. However, such powers should not be too excessive. Since the work of the guarantor has to take place and correspond to the general paradigm and policy of the university on quality, primarily, it concerns synchronization of the guarantor's work with general procedures of the department of in-

ternal quality education assurance in the university. Similarly, certain accountability of the head of the educational program in front of this department is reasonable.

The issue of combining in one person of the guarantor and the subject of administrative management remains debatable. Usually, everything will depend on the situation. However, in most cases, such a combination should be avoided. Mainly it concerns universities with state and communal ownership. The reason for it can be the risks of lobbying administrative interests. Moreover, such interests sometimes may not coincide with the purposes of a certain educational program. On the contrary, unfair protectionism of interests of the program via abuse of administrative authority can also be a negative consequence of combining the guarantor and administrator roles. Furthermore, the practice of combining

administrative and teaching work in Ukrainian universities is rather typical. It was inherited from the Soviet period, where the approach to the combination of positions, in fact, was a tradition. However, in most European and American universities, there is a bit different philosophic approach toward university management efficiency. Overall, it is characterized by the expediency of concentrating administrative or academic effort of a worker. Moreover, if they are united in one person, it can lead to inappropriate or insufficient performing his/her duties in one or another direction. Similarly, the combination of the guarantor position with the position of a pro-rector or a dean, for example, should not be a widespread practice. Nowadays, this situation should be a grounded exclusion.

Besides, it is vital to create an efficient system of motivation for academic management subjects in the educational program. Such motivation must encourage constant quality improvement. For instance, it can be purpose-related bonuses in providing educational processes in the program (KPI).

The efficient influence on the system of the quality provision is actual for subjects of administrative management of the educational program. This influence can be implemented via a certain complex of managerial actions. The complex of management tools should work in the paradigm of the process management (search for ways of providing quality in a certain educational process), purpose-focused management (provision of expediency of carrying out the measure), and motivational management (persuading both a guarantor and teachers in the interest of the quality in education). In certain situations, the process of selecting the guarantor under the conditions of an open competition can be grounded.

An alternative in the university management system organization is the model of managing educational programs without creating professional educational-scientific structural divisions (departments). Here the guarantors of educational programs report directly to the dean or his/her profile deputy (Figure 5).

Features of such a model imply the combination of signs of administrative management with linear subordination and academic management with functional interaction between subjects. Similarly,

this model has certain signs of a project or program-purpose approach. The objects of management are educational programs, as well as temporary scientific-research or consulting projects. This type of management structure is rather convenient if there are several powerful programs with many students. In this case, the norm of management over the number of subordinates remains for the guarantor, and there are chances for efficient coordination of their work from the side of the dean's office. However, in Ukraine, such a model can be applied in the best way in universities with a private form of ownership. State higher education institutions till now remain less flexible and conservative subjects. Moreover, the implementation of this type of structure in such universities is not sufficiently promoted by legislation and a lack of financial autonomy and dependence of the statute and staffing table on the central executive authority. Therefore, the organization of management in educational programs without professional educational-scientific structural divisions (departments) remains a future model for most Ukrainian universities.

It is essential to remark that the national accreditation of educational programs includes an institutional component. However, there is not a single criterion that could be considered as completely institutional. For example, by criterion # 8 "Internal provision of quality in the educational program," four of seven sub-criteria consider individual features of a certain educational program (Ministry of Education and Science of Ukraine, 2019). A similar situation takes place in other cases. Moreover, consequently, considering the mentioned above, it is reasonable and more correct to use the term "to a larger extent institutional criterion" instead of the term "institutional criterion".

Moreover, the institutional component of criterion № 8, first of all, is connected with the administrative management process in the educational program (rector's office, department of internal quality assurance of higher education, and so on). On the other hand, it is worth considering another essential influence to meet criterion № 8. This influence is connected with the academic management of the educational program (sub-criteria 8.2, 8.3, 8.4, 8.6, and partly others). Moreover, there are different management subjects: a guarantor, project/workgroup, provision-ing group, and so on.

Source: Developed by authors.

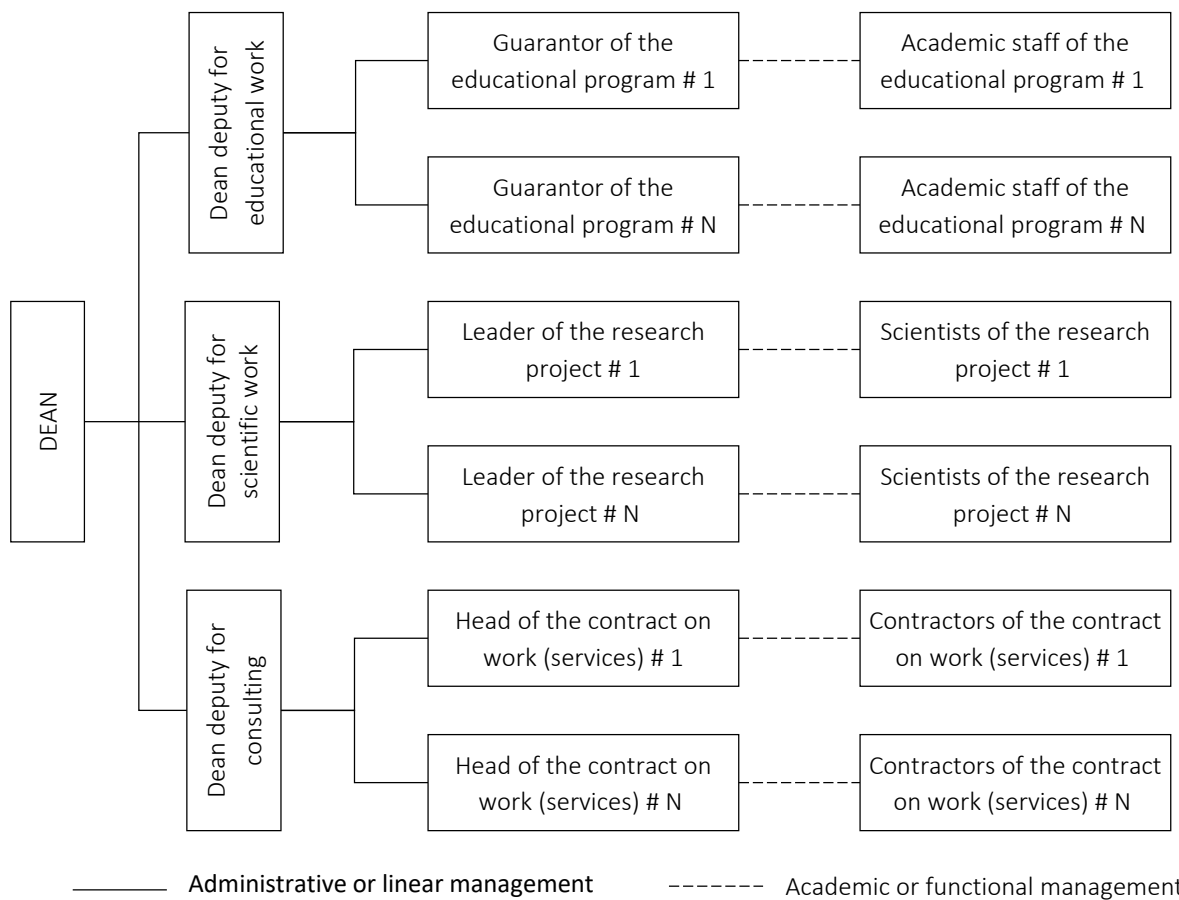


Figure 5. Models of quality assurance of educational programs without the creation of professional educational-scientific structural subdivisions (departments)

It is worth considering that due to the autonomy in a certain university, the internal provision system can take different forms of organization. In particular, it can be more centralized (powers of a guarantor are minor), or vice versa – decentralized (major powers and significant freedom of making decisions for the guarantor). The latter means that the quality of managing different educational programs in one or another university can be different. It is promoted by differences in the level of professionalism and individual qualities of guarantors, different approaches to determination and consideration of stakeholders' needs for the programs, and many other individual factors. That means that overall a university has a positive reputation for providing quality, but it automatically cannot grant the same level in each separate educational program. Moreover, vice versa, there can be situations when the formed internal practice of quality assurance of one educational program can

become a certain example, which should be followed for all other university programs. Therefore, setting up conformity exclusively based on institutionality does not promote the complex objective estimation of one criterion since it neglects the educational program's individual factors.

Unlike previous research, firstly, this study provides the classification of main types of organization in the management system of educational programs with the inclusion of professional educational-scientific subdivisions (departments); secondly, the development of the model of administrative and academic management of the educational program based on the process approach; thirdly, the formation of the concept and procedures for constant improvement in the quality of educational systems based on the development of internal competition, target-focusing, and motivational management.

CONCLUSION

Alternative models of quality management of educational programs under the supervision of a guarantor in the higher education system in Ukraine have been classified and developed for the first time in the research. Those models consider evolutionary, organizational, legal, and mental features of adapting Ukrainian universities to modern European and world practices on the quality provision.

The choice of the management model in quality assurance of educational programs remains a right of the internal autonomy of the higher education institution. Besides, if such an aim or motive is efficient debureaucratization in managing a post-Soviet university, it is reasonable to apply projects, program-targeted, matrix, and other flexible, adaptive structures. However, the models of process management can be significantly efficient. It is the process approach to quality assurance in higher education, which is based on standards and recommendations of the European higher education and represents a paradigm of educational program accreditation.

Within the process management system, the university needs to organize subsystems of administrative and academic management, which will function based on parallelism and integrity principles. Such dualism of the university management will form a set of advantages compared to traditional linear-bureaucratic management models in higher education. One of the most significant advantages is the enhancement of quality in the management of educational programs. In particular, it is promoted by better conditions for realizing the individual potential of guarantor-experts (concentration of attention on the content of education and constant improvement of the quality of the program), as well as managers-administrators (concentration of attention on performing accompanying organizational, logistic and service functions to provide the quality of the program). It will enable the guarantors and other experts not to distract from performing numerous routine duties, which frequently do not create conditionally added value for enhancing educational programs' quality but only lead to losses of time and resources.

Implementing the process management based on administrative and academic quality assurance of educational programs will lead to the destruction of traditional monopolies of specialized departments toward the exclusive right to teaching certain disciplines within a university. However, that is an essential stimulus for constant enhancement in such structural subdivisions' quality of work. Moreover, the parallel involvement of aim-focused motivational management in the administrative management system can significantly strengthen the effect of enhancing the quality of education and teaching.

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REFERENCES

- Adizes, I., Cudanov, M., & Rodic, D. (2017). Timing of Proactive Organizational Consulting: Difference between Organizational Perception and Behaviour. *Amfiteatru Economic*, 19(44), 232-248. Retrieved from https://www.amfiteatruconomic.ro/temp/Article_2606.pdf
- Atkins, K. (2019). *Project Management and Strategy Alignment in Academia* (Doctoral Thesis). Liberty University, School of Business. Lynchburg, USA. Retrieved from <https://digitalcommons.liberty.edu/doctoral/2299>
- Biesta, G. (2015). On the two cultures of educational research, and how we might move ahead: Reconsidering the ontology, axiology and praxeology of education. *European Educational Research Journal*, 14(1), 11-22. <https://doi.org/10.1177/1474904114565162>
- Cabinet of Ministers of Ukraine. (2015). *Litsenziini umovy provadzhennia osvithnoi diialnosti, zatverdzhenni Postanovoioi Kabinetu Ministriv Ukrainy vid 30.12.2015 r. No. 1187 [Licensing conditions of educational activity, approved by the Decree of the Cabinet of Ministers of Ukraine as of 30 December, 2015, No. 1187]*. (In Ukrainian). Retrieved from <https://zakon.rada.gov.ua/laws/show/1187-2015-%D0%BF>
- Chehrzad, M. M., Mahmoodi, A. H., Fathivajargah, K., Khorshidi, A., & Samimi-Ardestani, S. M. (2019). Pathology the Process of Accreditation of Educational Institutions and Therapeutic Centers and Presentation an Appropriate Model. *Research in Medical Education*, 11(1), 37-49. Retrieved from http://rme.gums.ac.ir/browse.php?a_id=740&sid=1&slc_lang=en&ftxt=0
- Donina, D., & Hasanefendic, S. (2018). Higher Education institutional governance reforms in the Netherlands, Portugal and Italy: A policy translation perspective addressing the homogeneous/heterogeneous dilemma. *Higher Education Quarterly*, 73(1), 29-44. <https://doi.org/10.1111/hequ.12183>
- ESG. (2015). *Standards and Guidelines for Quality Assurance in the European Higher Education Area*. Brussels, Belgium. Retrieved from http://www.enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf
- Gornitzka, A., Maassen, P., & de Boer, H. (2017). Change in university governance structures in continental Europe. *Higher Education Quarterly*, 71(3), 274-289. <https://doi.org/10.1111/hequ.12127>
- Hrnciar, M., & Madzik, P. (2013). Improving the Quality of Higher Education in Central Europe: Approach Based on GAP Analysis. *Higher Education Studies*, 3(4), 75-88. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1079292.pdf>
- Jibeen, T., & Khan, M. A. (2015). Internationalization of higher education: Potential benefits and costs. *International Journal of Evaluation and Research in Education*, 4(4), 196-199. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1091722.pdf>
- Kanadli, S. B., Zhang, P., & Kakabadse, N. K. (2020). How job-related diversity affects boards' strategic tasks performance: the role of chairperson. *Corporate Governance*, 20(4), 583-599. <https://doi.org/10.1108/CG-08-2019-0267>
- Khalatur, S., Khaminich, S., Dubovych, O., Budko, O., & Karamushka, O. (2020). Multiple system of innovation investment decisions adoption with synergetic approach usage. *Entrepreneurship and Sustainability*, 7(4), 2745-2763. [https://doi.org/10.9770/jesi.2020.7.4\(12\)](https://doi.org/10.9770/jesi.2020.7.4(12))
- Kolsaker, A. (2008). Academic professionalism in the managerialist era: a study of English universities. *Studies in Higher Education*, 33(5), 513-525. <https://doi.org/10.1080/03075070802372885>
- Konina, O. V., & Nanetadze, E. D. (2018). Managing a Modern University: The Role of Business Processes in the Structure of Establishments of Higher Professional Education. In E. Popkova & V. Ostrovskaya (Eds.), *Perspectives on the Use of New Information and Communication Technology (ICT) in the Modern Economy* (pp. 1053-1059). Retrieved from https://link.springer.com/chapter/10.1007/978-3-319-90835-9_118
- Kwiek, M. (2008). Academic entrepreneurship vs. changing governance and institutional management structures at European universities. *Policy Futures in Education*, 6(6), 757-770. <https://doi.org/10.2304/pfie.2008.6.6.757>
- Maassen, P., & Stensaker, B. (2019). From organised anarchy to de-coupled bureaucracy: The trans-

- formation of university organisation. *Higher Education Quarterly*, 73(4), 456-468. <https://doi.org/10.1111/hequ.12229>
17. Mineraud, J., Mazhelis, O., Su, X., & Tarkoma, S. (2016). A gap analysis of Internet-of-Things platforms. *Computer Communications*, 89, 5-16. Retrieved from <https://arxiv.org/pdf/1502.01181.pdf>
 18. Ministry of Education and Science of Ukraine. (2019). *Polozhennia pro akredytatsiiu osvitynikh prohram, za yakymy zdiisniuetsia pidhotovka здобувачив vyshchoi osvity. Zatverdzheno nakazom Ministerstva osvity i nauky Ukrainy No. 977 vid 11.07.2019 r.* [Provisions for Accreditation of Educational Programs, which are used for preparation of higher education applicants. Approved by the Order of Ministry of Education and Science of Ukraine No. 977 as of 11 July 2019]. (In Ukrainian). Retrieved from <https://zakon.rada.gov.ua/laws/show/z0880-19>
 19. Mosey, S., Wright, M., & Clarysse, B. (2012). Transforming traditional university structures for the knowledge economy through multidisciplinary institutes. *Cambridge Journal of Economics*, 36(3), 587-607. <https://doi.org/10.1093/cje/bes008>
 20. Murray, C. (2004). *A study of two-year college administrators regarding the impact of the accreditation process on institutional change* (Doctoral dissertation). The University of Alabama at Birmingham, USA. Retrieved from <https://search.proquest.com/openview/0d215f01b05deaeaf3d22a139de4c11?pq-origsite=gscholar&cbl=18750&diss=y>
 21. National Agency for Higher Education Quality Assurance. (2020a). *Akredytatsiini spravy [Accreditation cases]*. (In Ukrainian). Retrieved from <https://public.naq.gov.ua>
 22. National Agency for Higher Education Quality Assurance of Ukraine. (2020b). *Hlosarii [Glossary]*. (In Ukrainian). Retrieved from <https://naq.gov.ua/wp-content/uploads/2020/01/%D0%93%D0%BB%D0%BE%D1%81%D0%B0%D1%80%D1%96%D0%B9.pdf>
 23. Nelipa, D., Batrymenko, O., Rudenko, S., & Liashenko, I. (2018). Higher education management in Ukraine: will generation change help us transform it faster? *Scientific Bulletin of National Mining University*, 3, 167-175. <https://doi.org/10.29202/nvngu/2018-3/19>
 24. Rassokha, V., & Iskhakov, M. (2017). Program and Target-Oriented and Situational Approaches in Management of Route Vehicles on Stopping Points. *Transportation Research Procedia*, 20, 550-555. <https://doi.org/10.1016/j.trpro.2017.01.089>
 25. Roland, T. (2011). *An exploration of the accreditation self-study process from the perspectives of organizational effectiveness* (Doctoral dissertation). Pepperdine University, California, USA. Retrieved from <https://digitalcommons.pepperdine.edu/etd/102>
 26. Rudenko, S., Sapenko, R., Bazaluk, O., & Tytarenko, V. (2018). Management features of international educational projects between universities of Poland and Ukraine. *Scientific Bulletin of National Mining University*, 2, 142-147. <https://doi.org/10.29202/nvngu/2018-2/21>
 27. Sardak, S., & Samoylenko, A. (2014). National Economies Intellectualization Evaluating in the World Economy. *Economic Annals-XXI*, 9-10(2), 4-7. Retrieved from http://soskin.info/userfiles/file/2014/9-10_2014/2/Sardak_Samoylenko.pdf
 28. Shin, J. C. (2018). Conclusion: The Transformation of Higher Education Governance in East Asia. In J. Shin (Ed.), *Higher Education Governance in East Asia: Quality, Excellence and Governance* (pp. 273-285). Springer, Singapore. https://doi.org/10.1007/978-981-13-2469-7_16
 29. Stensaker, B. (2011). Accreditation of higher education in Europe-moving towards the US model? *Journal of Education Policy*, 26(6), 757-769. <https://doi.org/10.1080/02680939.2010.551785>
 30. Stensaker, B., Hovdhaugen, E., & Maassen, P. (2019). The practices of quality management in Norwegian higher education: Collaboration and control in study programme design and delivery. *International Journal of Educational Management*, 33(4), 698-708. <https://doi.org/10.1108/IJEM-11-2017-0327>
 31. The Verkhovna Rada of Ukraine. (2014). *Zakon Ukrainy "Pro vyshchu osvitu" [Law of Ukraine "On Higher Education"]*. (In Ukrainian). Retrieved from <http://zakon3.rada.gov.ua/laws/show/1556-18>
 32. Vasylieva, N. (2019). Improvement of Agricultural Management: Functional Comparative Approach. *Montenegrin Journal of Economics*, 15(1), 227-238. Retrieved from <https://ideas.repec.org/a/mje/mje-jnl/v15y2019i1227-238.html>
 33. Velychko, O. (2014). Development of infrastructural objects of providing logistics in the system of storing plant cultivation produce. *Economic Annals-XXI*, 1-2(1), 110-113. Retrieved from http://soskin.info/userfiles/file/2014/1-2_2014/1/Velychko.pdf
 34. Velychko, O., & Velychko, L. (2017). Management of inter-farm use of agricultural machinery based of the logistical system BOA. *Bulgarian Journal of Agricultural Science*, 23(4), 534-543. Retrieved from <https://www.agrojournal.org/23/04-03.pdf>
 35. Vican, S., Friedman, A., & Andreasen, R. (2019). Metrics, Money, and Managerialism: Faculty Experiences of Competing Logics in Higher Education. *The Journal of Higher Education*, 91(1), 139-164. <https://doi.org/10.1080/00221546.2019.1615332>
 36. Weaver, D., Spratt, C., & Nair, C. S. (2008). Academic and student use of a learning management system: Implications for quality. *Australasian Journal of Educational Technology*, 24(1), 30-41. <https://doi.org/10.14742/ajet.1228>