

The pedagogical algorithms of dialogic interaction between the user-student and the educational computer program are outlined: analysis of the technique of the observed motor action with the subsequent analysis of its quality; planning the process of teaching motor actions; determination of the content of further training on the basis of the analysis of motor action technique.

The pedagogical conditions of introducing innovative technologies of teaching motor actions in professional training of future physical culture specialists are defined, namely: support of the basic operations of a didactic cycle at teaching motor actions: planning of educational activity, application of means and methods of training, control and diagnostics; visualization of educational information with the use of physical exercises. It is assumed that the use of multimedia learning objects with the technique of motor actions in the conditions of practical training accelerates formation of motor skills and abilities based on the optimization of the process of kinesthetic sensations of correct performance of the exercise technique.

The computer program of the system of teaching motor actions and testing abilities to analyze the technique of performing motor actions of the sport on the basis of its visual observation (module-application "Video Tasks" for the distance learning system Moodle) is developed.

Based on the study of the laws of educational activity, a structural-functional model of teaching motor actions has been developed.

Prospects for further scientific research on this issue can be seen in developing an electronic training manual for distance teaching of motor actions in a particular sport.

Key words: *information technologies, institutions of higher pedagogical education, electronic means of education, future specialists of physical culture, professional training, motor actions.*

UDC 378.4+650

Kateryna Shykhnenko

Institute of Public Administration
and Research in Civil Protection

ORCID ID 0000-0002-8623-2907

DOI 10.24139/2312-5993/2020.08/329-342

MANAGEMENT THEORETICAL CONCEPTS IN HIGHER EDUCATION: RESEARCH DIMENSION

The study specified the research dimension features in the management concepts that were used to manage the education institutions in Ukraine. It identified how the specified features correlated with the management approaches such as reputational, process-outcome-oriented, and standard-oriented that are found in different types of higher education institutions. It revealed how the features of every concept were represented in the institutional constituent documents such as the University Statute and to what extent the institution stakeholders were aware of how the research was managed in their institutions. The study was explorative and used qualitative methods to collect data obtained from the participants' opinions. It included two phases such as a systematic review and a survey. The systematic review of the relevant literature and the institutional constituent documents

identified the features of the research dimension in the management concepts. It was also found that the criteria of the research effectiveness management are reputational, namely: process-outcome-oriented (qualimetric), and standard-oriented (relativistic).

Key words: *higher education, management theoretical concepts, management approaches, research dimension.*

Introduction. Conventional and emerging management theoretical concepts are being adopted from the commercial sector to ensure organisational change, stability, and competitive advantage of higher education institutions (Papadimitriou, 2011). The purpose of the use of management concepts seems to create settings and transparent rules for all internal processes and all the stakeholders. The reason for this trend is that efficient management is given priority in the contemporary agenda for quality assurance of higher education services (Kettunen, 2012; Seyfried & Pohlenz, 2018). Research, which is becoming more intense in the learning process of the university, is considered one of the main instruments to succeed in the competitive educational market. Given this, it must be managed appropriately so that the high-quality research output recognised internationally is produced (Hubbard & Carriquiry, 2019). In this competitive race for overall efficiency, the education institutions are found to use six management theoretical concepts such as Total Quality Management (TQM), EFQM Excellence Model, Balanced Scorecard (BSC), Project Management (PM), and Organisational Management (OM), whose principles are recognised in the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) (Kettunen, 2012; ESU, 2017). Therefore, the identification of the management concept that provides the highest efficiency in both managing institutions and research creates the gap for the study.

Analysis of relevant research. The literature review found plentiful research in educational management and research management which corresponds to the scope of the study. Sohel-Uz-Zaman and Anjalin (2016) reveal the Total Quality Management concept (TQM) and find it a comprehensive and flexible solution, which is the outcome quality-oriented (Meirovich & Romar, 2006). The TQM establishes the goals, strategy, settings, processes, and procedures for all stakeholders of the education institutions. Wani & Mehraj (2014) defines the TQM as a set of practices that pursue the goals of the systematic and continuous improvement of the service/product, satisfying the stakeholders' needs, and reducing costs. Meirovich and Romar (2006) find the concept credibly compatible with the educational context as it is considered applicable to any organisation, adjustable to the situation, and allows education institutions to develop their own concept of quality with benchmark values, and

practices to improve the service quality taken the stakeholders' requirements to be a priority. Many other scientists are certain about the applicability of TQM in education as they believe that values and principles of the TQM concept are mutually relevant to the higher education context as the overall purpose of the educational process is focused on an increase of productivity of future graduates, decreasing costs and improving quality of both education process and future generation's life standard (Venkatraman, 2007; Quinn et al., 2009). Wani & Mehraj (2014) are sure that TQM improves the education process in terms of making it motivating, improving curriculum, boosting the speed of training services, and making it economically efficient. They opine that the education process relies on TQM elements such as "leadership", "vision", "measurement and evaluation", "process control and improvement", "program design", "quality system improvement", "employee involvement", "recognition and reward", "evaluation and training", "student focus", and "other stakeholder focus" which play a key role. Given the above, it seems clear that TQM directed towards both inside the organisation and outside it which is well applied to the research which also brings internal value such as generating new knowledge and updating the content of educational process and external ones such as designing and testing new solutions to cope with economic or societal problems.

The European Foundation for Quality Management (EFQM) Excellence Model is the transitional concept for organisations that move to the establishment of TQM. The EFQM Excellence Model guides the organisations in identifying the gaps by measuring where they are on the path to excellence and to further help them in initiating corrective and stimulating actions. Arjomandi & Grimshaw (2009) elucidate and praise the customer-tailored approach which features the EFQM Excellence concept. They advocate its customer-tailordness and customer-centeredness and it provides the "5-Processes"-based criteria with lagging indicators in which science and research are put in second place after education processes (Vykydal et al., 2020). Additionally, the learning expected outcomes and research outputs serve as the subject benchmarking. When the EFQM model is applied in the educational organisation, this supposes that learners/students and teachers/tutors who are considered 'people' as terminology suggests are assigned with tasks and imposed with responsibilities before the institutional clients such as the parents/students, the future employers and representatives of the community. Students, as the model implies, perform two roles such as clients of the institution and as people-contributors to the life of the educational organisation and process. Excellence can be achieved when the organisation manages to keep balance and satisfy the needs of all relevant stakeholders. The

internal stakeholders such as management, teachers/lecturers, and students, are supposed to participate in evaluating the quality of the service. The model is compatible with the research dimension of the educational process as it engages stakeholders in self-assessment, cross-assessment, and external assessment of the quality of the research and resources allocated by the institution to complete it.

Tohidi, Jafari & Afshar (2010) emphasise the benefits of the Balanced Scorecard (BSC) concept for institutional strategic planning in both instruction and research. It focuses on measuring performance that is related to intangible assets of the organisation. The greatest advantage of the BSC concept is in its purpose to reveal the cause and effect relations between strategies and processes that rely on four perspectives such as financial, customer, internal business process, and learning and growth. Given this, to benefit financially, an organisation has to examine and meet its customers' needs and expectations, initially. To achieve this, education institutions should adjust their approach to process design and maintenance when implementing a quality management system. This, in its turn, raises the need to deepen and update its personnel's knowledge. The process of implementation of the BSC concept starts with strategic theme analysis which is related to analysing stakeholders or/and competitive environment. When strategic theme analysis is completed, there is a designed strategic map that combines the initiatives and actions for each strategic theme mentioned. In the settings of the education institution, the BSC concept is intended to focus on some strategic educational services instead of providing commonly delivered ones. The research is considered a strategic educational service as it covers specific fields, uses specific methods, and pursues specific goals. The concept helps to harmonize the annual action plans and involves stakeholders in the decision-making process. Concerning research, the perspective and financially beneficial directions for the research are discussed and approved at the institutional and stakeholder level. The research becomes the strategic service.

Trilling & Ginevri (2015) highlight the advantages of Project Management (PM) concept from the perspective of benefits for the students. They state that due to PM, the students' study and research become more efficient, predicted and qualitative. PM in learning and research makes the best way to build 21st-century skills because PM is the most important career skill. In the research, PM helps both students and teachers to organise the research as an algorithm of phases and steps such as planning, fulfilling, and reflecting. Research education projects seem to be one of the most efficient ways for decision-makers to gain control of it because their objectives, budgets (if any provided) and management periods are well-identified.

Connolly, James & Fertig (2017) describe the drawbacks of Organisational Management (OM) claiming that it is a command-based system, and it is good only for hierarchical structures of management and causes a lot of bureaucracy. This is related to the fact that OM relies on the leadership of the manager who is usually the key decision-maker in planning, staffing, and controlling, and who delegates responsibility limitedly and usually reluctantly. The key manager continually establishes and maintains both internal and external relationships with other organisations to succeed and achieve compatibility. They are involved in and control the organisation's environment to adequately anticipate change and bring about the adaptive responses required for the institution's survival. Given this, different management functions may dominate over the others at different phases in the life of the organisation such as planning or controlling. Under this management concept in the education institution, research seems a secondary process which is overregulated and lacks initiative.

The Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) attempted to unify the quality assurance system adding more emphasis to the research activity (ESU, 2017). It states that the educational system has to integrate learning and teaching in higher education, emphasising that the learning environment has to be connected with research and innovation. The concept is aimed at preparing students for active citizenship, for their future careers, supporting their personal development, creating advanced knowledge through stimulating research and innovation.

Given this, the learning environment with its content of programmes, learning opportunities, and facilities are supposed to correspond to the aim based on the accountability of all stakeholders and enhancement. Due to the concept, the institutions can equip the students with both academic knowledge and real-life skills including those that are transferable, which may influence their personal development, the overall welfare of the society and may be used in their future careers. Since research is based on student-centered learning principles, it does not only contribute to their knowledge and experience but plays an important role in stimulating their motivation, self-reflection, and engagement in the learning process.

Although the concepts are analysed, there was found a gap in analyses of the practical application of the reviewed concepts in different types of higher education institutions in Ukraine, specifically to manage research.

The aims of the article are as follow: 1) to specify the research dimension features in the management concepts such as TQM, EFQM, BCS, PM, OM, and ESG used to manage the education institutions in Ukraine; 2) to identify how the

specified features correlate with the management approaches such as reputational, process-outcome-oriented (qualimetric) and standard-oriented (relativistic) that are found in different types of the higher education institutions; 3) to find out how the features of every concept are represented in the institutional constituent documents such as the University Statute; 4) to clarify to what extent the institution stakeholders are aware of how research is managed in their institutions.

Research methods. The study was explorative and used qualitative methods to collect data obtained from the participants' opinions as recommended by Aspers & Corte (2019), and Mohajan (2018) for the explorative methodology. The study lasted a year from September 2019 to the end of March 2020. It was organised as described in Edgar & Manz, (2017) and included two phases such as a systematic review and a survey. The purpose of the review phase was to synthesise and systemise the research dimension features of management concepts comprising the scope of the study. The data for the review were drawn from the official websites. The survey aimed to explore the awareness of the stakeholders of how research is managed in their institutions. It was Google Forms-based and administered in four purposefully selected universities in Ukraine that were classic and research universities of different majors. These were technical, pedagogic, medical, and multi major universities such as the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" (technical research university), H. S. Skovoroda Kharkiv National Pedagogical University (pedagogic university), Bogomolets National Medical University (medical university) and Taras Shevchenko National University of Kyiv (multi major research university). The survey questionnaire consisted of 24 items and relied on the 5-point Likert scale with values 1 meaning "absolutely false about my institution"; 2 – "not true about my institution"; 3 – "it depends"; 4 – "more or less about my institution"; 5 – "completely true about my institution" (see Appendix A). The respondents' responses were partially verified by analysing the information from the official websites of the institutions.

A randomised sampling technique was used to hire 734 people as a population to administer the survey at the universities under the study. The demographics of the sampled individuals were as follows: 431 students aged between 20 and 22 who seek to obtain Bachelor's and Master's degrees and 303 lecturers and Department Managers.

Results. The systematic review of the relevant literature and the institutional constituent documents such as the University Statutes found the research dimension features in the management concepts such as Total Quality

Management (TQM), EFQM Excellence Model (EFQM), Balanced Scorecard (BSC), Project Management (PM), and Organisational Management (OM), and the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) (see Table 1).

Table 1

Research dimension features in management concepts employed in higher education in Ukraine

Feature	ESG	TQM	EFQM	BSC	PM	OM
Focus	Institution level research quality policy	Based on the input requirements for the research	Reliance on the process of the research	Outcome-orientedness	Reversed approach-based research	PDCA(Plan-Do-Check-Act)-model-based
Purpose	To assess the stakeholders' performance in research	To assess the overall quality of the service (research included)	To satisfy the research ordering party or customer, updating the service and upgrading the processes	To satisfy the customers with the quality of the research output	To structure the research to comply with the standard, to follow the research protocols	To comply with regulations and requirements
Research performers (students and lecturers)	Updating the qualification of the personnel, promoting research autonomy	Efficient use of the resources to fulfill numerous research projects, continuous in-service training	Stimulating personnel to succeed in the research, more efficient use of the internal staff potential	Continuous in-service training to succeed in the research better	Situational HR approach, outsourcing experts	Research is a secondary process for the students and lecturers
Research infrastructure	Cross-institutional, international	Cross-institutional, international, upgraded by the alumni	Efficient use of the available infrastructure	Situational outsourcing of the necessary equipment, efficiently used of the available infrastructure	The use of a "potluck" approach at every stage of the research process	Efficient use of the available infrastructure, bureaucratic management of all the processes

Note: ESG – Standards and Guidelines for Quality Assurance in the European Higher Education Area; TQM – Total Quality Management; EFQM – EFQM Excellence Model; BSC – Balanced Scorecard; PM – Project Management; OM – Organisational Management.

Additionally, the criteria of the research effectiveness that correlate to the management approaches such as reputational, process-outcome-oriented (qualimetric), and standard-oriented (relativistic) were also revealed. They are presented in Table 2.

Table 2

Management approaches and criteria of the research effectiveness employed in higher education in Ukraine

	Management approach		
	Reputational	Process-outcome-oriented (qualimetric)	Standard-oriented (relativistic)
Criteria of the research effectiveness	The place of education institutions in national (international) rankings of higher education institutions. Rating assessment of the quality of the research completed in the education institution by students and employers. Rating results based on the expert assessment of the research performed in the institution	Number of teachers' and students' publications. Dynamics of students participating in professional international competitions and contests. Dynamics of students involved in grant research projects. Results of students' participation in professional international competitions and contests	Compliance with the standards and requirements for the research quality implemented by the Ministry of Education and Science and Institutional Regulations

It was found that at the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute” they use integratively the TQM, BSC, and PM models, which are more commerce-oriented. In H. S. Skovoroda Kharkiv National Pedagogical University, they employ the ESG model combined with the OM model. In Bogomolets National Medical University, they use the EFQM, BSC, and PM models. In Taras Shevchenko National University of Kyiv, they rely on the OM and ESG models. The above implies that more commerce-oriented institutions tend to use the business models to manage the research, while other types of higher education institutions implement more conservative management concepts and approaches.

The results of the survey that was aimed to explore the awareness of the institution stakeholders concerning how the research activity is managed in their institutions are presented in Table 3.

Table 3

Results of the survey ($n = 734$)

	5-point Likert Scale					Median	SD	Margin of Error*
	1	2	3	4	5			
Q 1	87	98	86	339	124	98	97.07	146.8±85.08 (±57.96%)
Q 2	5	37	41	431	220	41	160.92	146.8±141.05 (±96.09%)
Q 3	18	45	72	221	378	72	135.28	146.8±118.58 (±80.78%)
Q 4	129	371	187	31	16	128	128.62	146.8±112.74 (±76.80%)
Q 5	419	111	128	42	34	111	141.02	146.8±123.61 (±84.20%)
Q 6	10	33	117	562	12	33	211.24	146.8±185.16 (±126.13%)
Q 7	83	102	89	333	127	102	94.31	146.8±82.67 (±56.32%)
Q 8	319	151	178	42	34	151	104.24	144.8±91.37 (±63.10%)
Q 9	439	91	138	32	24	91	152.84	144.8±133.97 (±92.52%)
Q 10	419	111	128	42	34	111	141.02	146.8±123.61 (±84.20%)
Q 11	5	38	117	462	112	112	163.33	146.8±143.17 (±97.53%)
Q 12	3	40	127	252	212	127	95.70	126.8±83.88 (±66.16%)
Q 13	139	361	157	41	26	139	119.84	144.8±105.04 (±72.55%)
Q 14	129	371	207	41	26	129	126.23	154.8±110.64 (±71.48%)
Q 15	409	121	118	52	34	118	135.61	146.8±118.87 (±80.97%)
Q 16	439	101	118	52	24	101	149.91	146.8±131.40 (±89.51%)
Q 17	10	33	317	362	12	33	158.18	146.8±138.65 (±94.45%)
Q 18	18	42	110	557	17	42	206.89	148.8±181.34 (±121.87%)
Q 19	5	38	117	472	102	102	167.68	146.8±146.98 (±100.13%)
Q 20	4	29	126	468	127	126	166.24	150.8±145.71 (±96.63%)
Q 21	5	38	117	442	132	117	155.04	146.8±135.90 (±92.58%)
Q 22	409	121	108	62	34	108	134.78	146.8±118.14 (±80.48%)
Q 23	436	94	118	45	31	94	149.00	144.8±130.60 (±90.20%)
Q 24	459	81	108	43	33	81	159.37	144.8±139.70 (±96.48%)

Note: *A confidence level is 95%.

As can be seen in Table 3, the Median values for the responses to Q 4, Q 8, Q12, Q13, Q14, and Q 20 were the highest. These indicated the respondents were certain that the research activity in their universities is focused on the outcomes, and its purpose is expected to be the assessment of the overall quality of the service which is intended to comply with Regulations and requirements. Concerning the research performers (students and lecturers), the respondents are sure that due to the research, they update their qualifications, and their research autonomy is promoted. The questioned individuals claim that they are supposed to use the resources efficiently to fulfill numerous research projects and receive continuous in-service training. The respondents are involved in the use of the research infrastructure cross-institutionally, internationally, and it should be upgraded by the alumni students. The above answers imply that the universities – when performing research – rely on the combined management including mostly elements of BSC,

OM, ESG management concepts. The above results also imply that the research activity at universities in Ukraine seems to be process-outcome-oriented (qualimetric). This means that the management pursues the goals of raising the number of the fulfilled research projects and compliance with Regulations and often still not seeing them as a source of funding or/and reputation.

Thus, despite the lack of a unified vision of how the research dimension is managed in higher education institutions, it was clear that management in terms of research tends to be still conservative. The effectiveness of the research is managed and monitored using regulatory documents and criteria.

The study is consistent with findings in university research curriculum development and strategic planning (Carnell & Fung, 2017; Ofori & Atiogbe, 2012; Seleznyov & Czerniawski, 2020). It contributes to the previous research in terms of identifying the features of the research activity in relation to the management concept that is employed at a certain institution (Kettunen, 2012; Soheli-Uz-Zaman & Anjalin, 2016; Tohidi, Jafari & Afshar, 2010). These tentatively imply that there is no doubt that the above mentioned management concepts have the full potential to serve education. The authors claim that it must not be taken for granted that there are no challenges or barriers in implementing the mentioned concepts in education. Some educators express doubts concerning the fact that philosophy which is developed for business may not be appropriate for a service organisation like education institutions. They claim that even such terms as the product, client, empowerment, or even strategy, reengineering do not easily correspond to higher education institutions settings.

Conclusions. The systematic review of the relevant literature and the institutional constituent documents such as the University Statutes identified the features of the research dimension in the management concepts such as Total Quality Management, EFQM Excellence Model, Balanced Scorecard, Project Management, and Organisational Management, and the Standards and Guidelines for Quality Assurance in the European Higher Education Area. It was also found that the criteria of the research effectiveness management are reputational, process-outcome-oriented (qualimetric), and standard-oriented (relativistic). In the institutions that were selected for the intervention the management concepts are used in combination and the commerce-oriented institutions tend to use the business models to manage the research. Other types of higher education institutions implement more conservative management concepts and approaches. The survey found that the research activity at universities under study in Ukraine seems to be process-outcome-oriented (qualimetric). The management pursues the goals of raising the

number of fulfilled research projects and compliance with Regulations. There is a lack of a unified vision of how the research dimension is managed in higher education institutions. The effectiveness of the research is managed and monitored using regulatory documents and criteria.

REFERENCES

- Arjomandi, M., & Grimshaw, P. (2009). *An EFQM excellence model for higher education quality assessment*. Proceedings of the 20th Australian Association for Engineering Education Conference, 1015-1020. Retrieved from: https://www.academia.edu/2055675/An_EFQM_excellence_model_for_higher_education_quality_assessment.
- Aspers, P., & Corte, U. (2019). What is qualitative in qualitative research. *Qualitative Sociology*, 42, 139-160. <https://doi.org/10.1007/s11133-019-9413-7>.
- Carnell, B. & Fung, D. (2017). *Developing the Higher Education Curriculum*. London: UCL Press. <https://doi.org/10.14324/111.9781787350878>.
- Connolly, M., James, C., & Fertig, M. (2017). The difference between educational management and educational leadership and the importance of educational responsibility. *Educational Management Administration & Leadership*, 47 (4), 504-519. <https://doi.org/10.1177%2F1741143217745880>.
- Edgar, T. W., & Manz, D. O. (2017). Chapter 4 - Exploratory Study. In: T. W. Edgar and D. O. Manz, *Research Methods for Cyber Security*, (pp. 95-130). Elsevier. <https://doi.org/10.1016/B978-0-12-805349-2.00004-2>.
- European Students' Union (ESU) (2017). *Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG 2015)*. Retrieved from: <https://www.esu-online.org/?publication=standards-guidelines-quality-assurance-european-higher-education-area-esg-2015>.
- Hubbard, D. W., & Carriquiry, A. L. (2019). Quality Control for Scientific Research: Addressing Reproducibility, Responsiveness, and Relevance. *The American Statistician*, 73 (1), 46-55. <https://doi.org/10.1080/00031305.2018.1543138>.
- Kettunen, J. (2012). Integrated Higher Education Management: Summary of Management Approaches. In M. Savsar (Ed.), *Quality Assurance and Management*, (pp. 193-208). <https://doi.org/10.5772/32067>.
- Meirovich, G., & Romar, E. J. (2006). The Difficulty in Implementing TQM in Higher Education Instruction – The Duality of Instructor/Student Roles. *Quality Assurance in Education*, 14, 324-337. <https://doi.org/10.1108/09684880610703938>.
- Mohajan, H. K. (2018). Qualitative research methodology in social sciences and related subjects. *Journal of Economic Development, Environment, and People*, 7 (1), 23-48. <https://doi.org/10.26458/jedep.v7i1.571>.
- Ofori, D. & Atiogbe, E. (2012). Strategic planning in public universities: A developing country perspective. *Journal of Management and Strategy*, 3 (1), 67-82. <https://doi.org/10.5430/jms.v3n1p67>.
- Quinn, A., Lemay, G., Larsen, P., and Johnson, D. M. (2009). Service Quality in Higher Education. *Total Quality Management and Business Excellence*, 20, 139-152. <https://doi.org/10.1080/14783360802622805>.
- Papadimitriou, A. (2011). *The enigma of quality in Greek higher education: A mixed-methods study of introducing quality management into Greek higher education* [Published Dissertation]. Enschede, Center for Higher Education Policy Studies (CHEPS). <https://doi.org/10.3990/1.9789036531559>.

- Selezniov, S., & Czerniawski, G. (Eds.) (2020). *A research approach to curriculum development: A British Curriculum Forum event report*. London: British Educational Research Association. Retrieved from: <https://www.bera.ac.uk/publication/a-researchapproach-to-curriculum-development-a-british-curriculum-forum-event-report>.
- Seyfried, M., & Pohlenz, P. (2018). Assessing quality assurance in higher education: quality managers' perceptions of effectiveness. *European Journal of Higher Education*, 8 (3), 258-271. <https://doi.org/10.1080/21568235.2018.1474777>.
- Sohel-Uz-Zaman, A. S. Md. & Anjalin, U. (2016). Implementing Total Quality Management in Education: Compatibility and Challenges. *Open Journal of Social Sciences*, 4, 207-217. <http://dx.doi.org/10.4236/jss.2016.411017>.
- Tohidi, H., Jafari, A., & Afshar, A. A. (2010). Using a balanced scorecard in educational organizations. *Procedia Social and Behavioral Sciences*, 2 (2), 5544-5548. <https://doi.org/10.1016/j.sbspro.2010.03.904>.
- Trilling, B., & Ginevri, W. (2015). Project Management for Education – The Bridge to 21st Century Learning. *Educational Foundation, Management Institute*. Retrieved from: <https://pmief.org/library/project-management-for-education>.
- Venkatraman, S. (2007). A Framework for Implementing TQM in Higher Education Programs. *Quality Assurance in Education*, 15, 92-112. <https://doi.org/10.1108/09684880710723052>.
- Vykydal, D., Foltá, M. & Nenadál, J. (2020). A Study of Quality Assessment in Higher Education within the Context of Sustainable Development: A Case Study from the Czech Republic. *Sustainability*, 12, 47-69. <https://doi.org/10.3390/su12114769>.
- Wani, I. A. & Mehraj, H. K. (2014). Total Quality Management in Education: An Analysis. *International Journal of Humanities and Social Science Invention*, 3, 71-78. [http://www.ijhssi.org/papers/v3\(6\)/Version-4/N0364071078.pdf](http://www.ijhssi.org/papers/v3(6)/Version-4/N0364071078.pdf).

Appendix A. Survey Questionnaire

Please, tick the points which seem more characteristic for managing research at your institution.

		5-point Likert Scale				
		1	2	3	4	5
<i>It is mainly focused on:</i>						
1.	institution level research quality policy					
2.	the input requirements for the research					
3.	ensuring the reliance on the process of the research					
4.	outcomes					
5.	the use of the reversed approach (end-to-beginning)					
6.	the use of PDCA(Plan-Do-Check-Act)-model					
<i>Its purpose is:</i>						
7.	to assess the stakeholders' performance in research					
8.	to assess the overall quality of the service (research included)					
9.	to satisfy the research ordering party or customer, updating the service and upgrading the processes					
10.	to satisfy the customers with the quality of the research output					
11.	to structure the research to comply with the standard, to follow the research protocols					
12.	to comply with regulations and requirements					

<i>Research performers (students and lecturers):</i>						
13.	are updating the qualification, and their research autonomy is promoted					
14.	efficiently use of the resources to fulfil numerous research projects, receive continuous in-service training					
15.	are stimulated to succeed in the research, potential attempted to be used more efficiently					
16.	receive continuous in-service training to succeed in the research better					
17.	are approached by HR situationally, and experts are outsourced					
18.	take the research as a secondary process					
<i>Research infrastructure is supposed to be:</i>						
19.	cross-institutional, and international					
20.	cross-institutional, international, and upgraded by the alumni					
21.	efficient in the use of the available infrastructure					
22.	based on the situational outsourcing of the necessary equipment, efficiently used of the available infrastructure					
23.	based on the use of a "potluck" approach at every stage of the research process					
24.	based on the efficient use of the available infrastructure with bureaucratic management of all the processes					

Note: 1- absolutely false about my institution; 2 – not true about my institution; 3 – it depends; 4 – more or less about my institution; 5 – completely true about my institution.

АНОТАЦІЯ

Шихненко Катерина. Теоретичні концепції управління вищою освітою: дослідницька складова.

У статті визначено характеристики дослідницької складової в концепціях менеджменту, які використовуються для управління закладами вищої освіти в Україні. Визначено, як такі характеристики співвідносяться з підходами до управління закладами освіти, що застосовано в різних типах університетів, такими як репутаційний, процес-орієнтований і стандарт-орієнтований. Показано, як особливості кожної концепції представлені в таких інституційних установчих документах, як Статут університету, і якою мірою стейкхолдери закладів вищої освіти поінформовані про те, як здійснюється управління науковими проектами в їхніх установах. Дослідження було експлоративним та включало два етапи: аналіз літератури й опитування. Огляд літератури та інституційних установчих документів виявив характеристики дослідницької складової в концепціях управління. Використано якісні методи для збору даних, отриманих на основі думок та суджень учасників. Установлено, що критеріями управління ефективністю досліджень є репутаційний, орієнтований на процес (кваліметричний) і орієнтований на стандарт (релятивістський). В інституціях, обраних для аналізу, концепції управління використовуються комбіновано; комерційно-орієнтовані установи, як правило, застосовують бізнес-моделі для управління науковими проектами, у той час як інші типи закладів вищої освіти реалізують більш консервативні концепції й підходи до управління. З'ясовано, що для управління науковою діяльністю в обраних для аналізу університетах України переважно використовується підхід, орієнтований на процес. Керівництво університетів переслідує за мету збільшення

кількості виконаних наукових проєктів та дотримання вимог законодавства і при цьому не завжди розглядає їх як джерело фінансування і/або створення репутації. Виявлено відсутність єдиного бачення щодо управління науковою роботою в закладах вищої освіти; виявлено, що управління цією складовою діяльності закладів має тенденцію бути консервативним. Ефективність досліджень управляється й контролюється за допомогою нормативних документів і розроблених критеріїв.

Ключові слова: вища освіта, теоретичні концепції управління, підходи до управління, дослідницька складова.

РЕЗЮМЕ

Шихненко Катерина. Теоретические концепции управления высшим образованием: исследовательская составляющая.

В работе определены характеристики исследовательской составляющей в концепциях менеджмента, которые используются для управления образовательными учреждениями в Украине. Выяснено, как в различных типах высших учебных заведений указанные характеристики соотносятся с такими подходами к управлению, как репутационный, ориентированный на процесс и ориентированный на стандарт. Раскрывается, как особенности каждой концепции были представлены в институциональных учредительных документах, таких как Устав университета, и в какой степени стейкхолдеры учреждений были осведомлены о том, как осуществляется управление научной работой в их учреждениях. Исследование было эксплоративным и использовало качественные методы для сбора данных, полученных на основе мнений участников. Оно включало два этапа: анализ литературы и опрос. Обзор литературы и анализ институциональных учредительных документов выявили характеристики исследовательской составляющей в концепциях управления. Также было установлено, что критериями управления эффективностью исследований являются репутационный, ориентированный на процесс (квалиметрический) и ориентированный на стандарт (релятивистский).

Ключевые слова: высшее образование, теоретические концепции управления, подходы к управлению, исследовательская составляющая.

УДК 342. 9

Марина Ячменик

Сумський державний педагогічний
університет імені А.С. Макаренка

ORCID ID 0000-0003-3547-046X

DOI 10.24139/2312-5993/2020.08/342-351

АКАДЕМІЧНА ДОБРОЧЕСНІСТЬ ЯК ЕЛЕМЕНТ ЗАБЕЗПЕЧЕННЯ ЯКОСТІ ОСВІТИ У ВИЩІЙ ШКОЛІ: ДОСВІД СУМСЬКОГО ДЕРЖАВНОГО ПЕДАГОГІЧНОГО УНІВЕРСИТЕТУ ІМЕНІ А. С. МАКАРЕНКА

У науковій розвідці здійснено спробу дослідити забезпечення принципів академічної доброчесності в освітньому просторі закладів вищої освіти як основи якості освіти.

На прикладі результатів опитування здобувачів вищої освіти та науково-педагогічних працівників, проведеного в Сумському державному університеті імені