

CHAPTER 5

PRIORITIES FOR DEVELOPING THE SCIENTIFIC AND
PEDAGOGICAL POTENTIAL OF ACADEMIC STAFF IN UKRAINIAN
UNIVERSITIES UNDER INSTITUTIONAL AUTONOMY

ABSTRACT

This study analyzes the priorities for developing the scientific and pedagogical potential of academic staff in Ukrainian universities under institutional autonomy. The research is based on a survey of 243 staff members, with data processed and analyzed using MS Excel. The findings show that, although human resources are the key asset of higher education, staff development is not sufficiently prioritized within university management systems. The most urgent needs identified include enhancing the prestige of the profession, strengthening motivation, reducing teaching workload, improving research infrastructure, introducing effective incentives, and establishing systematic monitoring and evaluation. Staff development is viewed both as a managerial challenge and as a vital resource for improving the effectiveness of universities in the knowledge economy. The chapter stresses that innovative personnel management practices should focus on recognition, engagement, and career growth, thereby fostering organizational resilience and international competitiveness. It concludes that creating effective incentive systems to stimulate participation in research and international projects must become a cornerstone of university policy, ensuring the sustainable development of Ukrainian higher education institutions.

KEYWORDS

Scientific and pedagogical potential, Ukrainian universities, institutional autonomy, academic staff development, knowledge economy, recognition and engagement, career growth, organizational resilience, international competitiveness, sustainable development.

Marking the development of the "knowledge economy" as a national priority of Ukraine makes increased demands on local higher education institutions (HEIs) in terms of fulfilling their scientific and pedagogical potential. It is based on the potential ability of academic staff to produce new knowledge, ideas and innovations, transferring them to students, thus forming them as representatives of a new generation of professionals.

Choosing as a basis the high points of international (Supporting growth and jobs – an agenda for the modernization of Europe's higher education systems [1]; Bucharest Communiqué [2]; Yerevan Communiqué [3]; Rome Ministerial Communiqué [4]) and national legislation and regulations on education (Law "On Education" [5]; Law "On Higher Education" [6]; National Report on the State and Prospects of Education in Ukraine, [7, 8]; Strategy for Higher Education Development in Ukraine for 2021–2031 [9]) on the value of scientific and pedagogical potential of higher education academic staff in building up higher education scientific and educational potential, foreign scientists (K. Türk [10], P. Seldin, J. E. Miller, C. A. Seldin [11], R. de la Torre, A. Lusa, M. Mateo, E.-H. Aghezzaf [12], etc.) and Ukrainian researchers (S. Kalashnikova, I. Drach, O. Kovalenko, S. Kurbatov, N. Nevmerzhychka, O. Palamarchuk, V. Ryabchenko, L. Chervona [13, 14], V. Lugovyi [15]; Yu. Skyba, G. Chornoivan, O. Zhabenko, I. Regeilo, O. Otych, V. Muromets, S. Melnyk [16, 17], O. Yaroshenko et al [18–20], Slyusarenko [21], Yakymenko et al [22], etc.) emphasize that the development of this potential is not an end in itself, but a factor in expanding the HEIs academic and institutional autonomy and strengthening the social function of higher education in society.

However, according to the analysis of modern educational practice, domestic universities do not fully make use of the opportunities, provided by the Laws of Ukraine "On Education" (2017) and "On Higher Education" (2014), to develop scientific and pedagogical potential of their academic staff. This is manifested in the lack of effective measures to raise the prestige of scientific and pedagogical work and motivate university staff for professional growth; work overload with educational and other activities; the dependence of HEI staff list on the number of students that creates risks for unemployment of research and teaching staff (RTS) and causes its migration, thus reducing human resource and scientific and pedagogical potential of the national higher school; obsolescence or total lack of research and information infrastructures for professors' self-training as well as for training higher education students that hinders the implementation of research-based training and professional development of research and teaching staff; insufficient development of organizational, methodological and financial mechanisms for managing professional development of research and teaching staff, monitoring its quality and evaluating results; weak contacts of HEIs with leading scientific institutions and stakeholders, etc.

Thus, identifying the needs and thereafter determining the priorities for universities to manage the growth of professors' scientific and pedagogical potential is of high theoretical and practical importance for developing an effective strategy for their development, improving their ranking and ensuring the proper quality of higher education services based on modernization trends of European and domestic higher education in the process of joining European Higher Education Area.

Analyzing the latest scientific sources on this issue, we discovered that it incorporates scientific interests of many scientists in the field of educational/pedagogical sciences.

Thus, the purpose of the study is to determine the development needs of academic staff's scientific and pedagogical potential of Ukrainian universities in the context of expanding institutional autonomy and to identify opportunities to consider when developing institutional development strategies at local universities.

5.1 LATEST RESEARCH ANALYSIS

In particular, the development issue of universities' research and innovation potential is released in the works of S. Kalashnikova, I. Drach, O. Palamarchuk, V. Ryabchenko, L. Chervona [13, 14], V. Lugovyi [15], O. Slyusarenko [21] and others; professional development technologies of research and teaching staff and increase of its potential are covered in research papers of Yu. Skyba [16, 17], O. Yaroshenko [16–20], N. Divinska [18–20], O. Zhabenko [16–20], G. Chornoivan [16–20], I. Regeilo [16, 18–20], Otych O. [17], V. Muromets [16], Melnyk S. [23], I. Tamozhska, N. Tymofiienko, A. Demianiuk, M. Klyap, M. Tsurkan [24], S. Yakymenko, T. Vasiutina, D. Nefodov, L. Pankiv, A. Stryzhakov, M. Denysiuk [22] and others.

Scientific sources, devoted to research in the field of higher education, characterize different types of research and teaching staff potential, namely: intellectual one (M. Dolishnyi, K. Lipovska, S. Maniv, S. Ilyashenko, etc.), emotional one (A. Gatsko, O. Smigunova, etc.), spiritual one (V. Pankov, E. Pomitkin, etc.), leadership one (S. Kalashnikova, T. Gura, etc.) and personal one (D. Leontiev, V. Ryabchenko, etc.).

At the same time, despite the significant number of papers on the problem of developing research and teaching staff potential, the priorities, needs and growth mechanisms of its scientific and pedagogical potential still remain insufficiently substantiated. According to our hypothesis, the development effectiveness of academic staff's scientific and pedagogical potential in Ukraine depends on the harmonization of their needs with the priorities of educational policy and strategies of HEI institutional development. Therefore, there is a need for a special survey on RTS needs, and further research on possible models and plans for the development of domestic universities' scientific and pedagogical potential is of high demand.

The study of priorities and needs for the development of scientific and pedagogical potential of Ukrainian universities' academic staff in the context of expanding institutional autonomy was conducted by researchers of the Department of Integration of Higher Education and Science of the Institute of Higher Education of the National Academy of Educational Sciences of Ukraine during 2022–2024. To obtain empirical material, the researchers developed a questionnaire consisting of 6 closed-ended questions with 56 suggested answers, structured in blocks that covered the most important areas in developing scientific and pedagogical potential of Ukrainian universities' academic staff.

The survey was conducted in the period from May to June and from September to October 2022. Research and teaching staff from 11 universities of Ukraine (3 of them – classical, 4 – technical, 2 – economic, 1 – pedagogical and 1 – medical), in particular, from Sumy State University (SSU), Uzhhorod National University (UzhNU), Yuriy Fedkovych Chernivtsi National University (ChNU), National Technical University "Kharkiv Polytechnic Institute" (NTU "KhPI"), Lutsk National Technical University (LNTU), National Aviation University (NAU), Kyiv National Economics University named after Vadym Hetman (KNEU), Simon Kuznets Kharkiv National University of Economics (KhNUE), National Pedagogical Dragomanov University (NPU), National Pirogov Memorial

Medical University, Vinnytsya (NMUV), National University of Water Environmental Engineering (NUWEE) filled in the questionnaire. Higher education institutions represented 8 of the 25 regions of Ukraine, including the leading university centers – Kyiv and Kharkiv.

The quantitative and qualitative analysis of the survey results was conducted using the methods of mathematical statistics based on Excel software. To determine the priority factor, the rating was based on the number of responses higher than 50%.

In total, 243 universities' research and teaching staff took part in the survey on a voluntary basis, of which 75.3% have a scientific degree (Dr.Hab. – 24 people (9.9%), PhD – 159 people (65.4%)), no degree – 60 professors (24.7%).

The distribution of the surveyed universities' research and teaching staff is shown on **Fig. 5.1**.

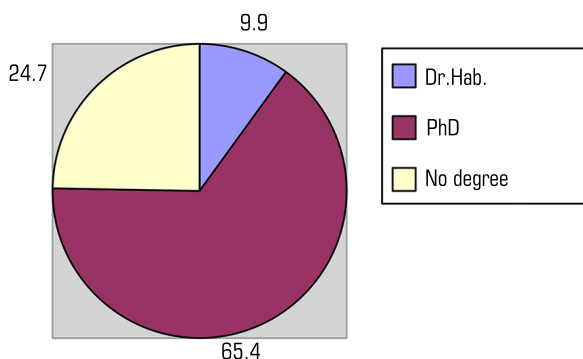


Fig. 5.1 The share of surveyed research and teaching staff by category (%)

5.2 RESULTS ANALYSIS

During the survey, considerable attention was paid to identifying factors that are important for the development of scientific and pedagogical potential of local universities' academic staff.

So, *Question 1 "Which of the factors are key to career growth in your HEI?"* gave us the following answers from the respondents (**Table 5.1**).

The survey data, presented in **Table 5.1**, shows that the represented universities' research and teaching staff consider the "professional competence development" as the most important factor for career growth at the university (7 universities).

The second most important factor is "international activity" (6 universities), the third place takes the "research achievements" factor (in 5 out of 11 universities the share of answers is higher

than 50%) and the fourth place is "teaching achievements" (in 3 out of 11 universities a response rate is 50% or higher).

● **Table 5.1** Factors important for career growth in HEIs, in number of persons, %

University	Number of persons									
	Teaching achievements		Research achievements		Professional competence development		International activity		Total	
	Quant.	%	Quant.	%	Quant.	%	Quant.	%	Quant.	%
SSU	3	23	13	100	4	30.8	12	92.3	13	100
UzhNU	11	32.4	22	64.7	20	58.8	18	52.9	34	100
ChNU	6	31.6	13	68.4	7	36.8	5	26.3	19	100
NTU "KhPI"	17	54.8	14	45.2	9	29	5	16.1	31	100
LNTU	8	38	15	71.4	12	57.1	6	28.6	21	100
NAU	11	57.9	15	78.9	16	84.2	18	94.7	19	100
NUWEE	8	34.8	11	47.8	11	47.8	5	21.8	23	100
KNEU	10	50	5	25	13	65	11	55	20	100
KhNUE	6	30	9	45	15	75	11	55	20	100
NPU	6	26	8	34.8	14	60.7	6	26	23	100
NMUV	3	15	8	40	12	60	12	60	20	100

Considering the results of the survey of research and teaching staff, professional competence development is one of the most important factors in career development. So, we believe that universities should introduce and expand using various forms and technologies to improve their level, including seminars, workshops, trainings, webinars, master-classes, open courses, etc.

Let us note that the importance of "international activity" for the career growth was indicated by the respondents from 2 universities – NAU and SSU (94.7% and 92.3%, respectively); "research achievements" were noted by only 1 university – SSU (100%), "professional competence development" – NAU (84.2%) and KhNEU (75%), "teaching achievements" – NTU "KhPI" (54.8%) and NAU (57.9%).

Thus, as seen from the results, the "teaching achievement" factor has the least impact on the development of a university professor's professional career. However, in our opinion, the universities' lack of desire to provide quality teaching in general has a negative impact on the education quality of its students.

In addition, the questionnaire revealed such answers of the respondents as: activity, desire to do business and work in a team, closeness to administration, family ties, financial incentives for people who is able to promote career growth. These answers show that universities do not always consider professor's achievements in his/her career.

Factors inhibiting career and professional growth, as believed by the respondents, are: overload of educational and other work – 20.4%, outdated and weak material and technical base – 20%, weak contacts with leading scientific institutions – 18.7%, lack of scientific manager/supervisor – 12.1%, low foreign language proficiency level – 11.7%, unfavorable psychological atmosphere in the team – 9%, low level of computer proficiency – 7.7%.

Regarding *Question 2 of our survey* “What forms of RTS professional development/advanced training are implemented in your HEI?”, the following distribution of answers was established (Table 5.2).

● **Table 5.2** Forms of RTS professional development , implemented in HEI, in number of persons, %

List of professional development forms	University										
	SSU	UzhNU	ChNU	NTU "KhPI"	LNTU	NAU	KNEU	KhNUE	NPU	NMUV	NUWEE
	Number of persons										
1	2	3	4	5	6	7	8	9	10	11	12
Mandatory trainings/ courses for young academic staff	3	4	–	15	6	5	5	6	–	3	7
%	23	11.8	–	48.4	28.6	26.3	25	30	–	15	30.4
Mandatory trainings/ courses for new academic staff	3	1	–	8	1	2	3	–	–	1	4
%	23	2.9	–	25.8	4.8	10.5	15	–	–	5	17.4
Trainings/ courses for the development/modernization of educational disciplines	7	6	2	10	2	8	10	17	12	7	6
%	53.8	17.6	10.5	32.3	9.5	42.1	50	87	52.1	35	26
Mentoring	–	4	6	8	4	15	1	2	1	7	4
%	–	11.8	31.6	25.8	19	78.9	5	10	4.3	35	17.4

● Continuation of Table 5.2

1	2	3	4	5	6	7	8	9	10	11	12
Elective/on-demand courses	11	2	4	10	3	7	10	10	–	6	8
%	84.6	5.9	21	32.2	14.3	36.8	50	50	–	30	34.8
Trainings on the use of IT in teaching	10	4	1	7	1	–	12	14	14	1	6
%	76.9	11.8	5.3	22.6	4.8	–	60	70	60.9	5	26
Trainings for researchers	5	2	–	3	5	10	2	1	–	1	2
%	38.5	5.9	–	9.7	23.8	52.6	10	5	–	5	8.7
Internship in Ukraine (in other HEIs, research institutions, enterprises, etc.)	8	27	14	23	18	17	11	7	14	12	12
%	61.5	79.4	73.7	74.2	85.7	89.5	55	35	60.9	60	52.2
Internship abroad (in other HEIs, research institutions, enterprises, etc.)	8	16	10	15	18	15	7	9	6	11	9
%	61.5	47	52.6	48.4	85.7	78.9	35	45	26	55	3.1
Total, respondents	13	34	19	31	21	19	20	20	23	20	21
%	100	100	100	100	100	100	100	100	100	100	100

The analysis of the results, given in **Table 5.2**, testified that Ukrainian universities actively use a wide range of capacity development forms for their research and teaching staff. First of all, this is an "internship in Ukraine" (in 9 universities the indicator is higher than 50%); "internship abroad" is on the second position (in 5 – the indicator is higher than 50%); in third place – training on the use of IT in teaching and trainings/courses for the development/modernization of educational disciplines (in 4 – the indicator is higher than 50%); the fourth position was taken by elective/on-demand courses (in 3 – the indicator is higher than 50%); mentoring for researchers (1 – the indicator is higher than 50%); in fifth place – mandatory trainings/courses for young academic staff and mandatory trainings/courses for new academic staff (no university has scored higher than 50%).

Given that the internship procedure for research and teaching staff in Ukraine is somewhat formal for a number of reasons, primarily the lack of funds, we consider it appropriate to introduce training systems in universities to enhance research and teaching staff's research and methodological competence.

In our opinion, universities do not pay enough attention to such technologies for developing research and teaching staff's potential as "peer to peer development", training for young researchers and young professors that have recently become increasingly popular in the educational community. We believe that the active use of the proposed technologies in universities would contribute, on one hand, to improving the research quality, on the other – to increase the higher education quality at different levels.

On the positive side, universities are actively responding to the challenge of digitizing higher education, in particular by offering "training on the use of IT in teaching". It is also obvious that the above-mentioned development form of research and teaching staff's potential is further relevant, as well as the content expansion of proposals related to the digitalization processes in higher education.

The next *Questions 3* of the questionnaire aimed at discovering forms for teaching competence development, implemented at the university. The results of the survey are presented in **Table 5.3**.

● **Table 5.3** Forms for teaching competence development, implemented at the university, in number of persons, %

		University										
List of forms for teaching competence development		SSU	UzhNU	ChNU	NTU "KhPI"	LNTU	NAU	KNEU	KhNUe	NPU	NMUV	NUWEE
1	2	3	4	5	6	7	8	9	10	11	12	13
Mandatory trainings/ courses to improve teaching	Number of persons	4	2	-	5	4	1	4	7	4	4	3
	%	30.8	5.9		16.1	19	5.2	20	35	17.4	20	13
Elective trainings/ courses to improve teaching	Number of persons	10	6	3	19	5	13	8	15	16	12	9
	%	76.9	17.6	15.9	61.3	23.8	68.4	40	75	69.6	50	39.1
Research on teaching and learning in higher education	Number of persons	2	6	5	9	6	17	6	7	2	5	3
	%	15.4	17.6	26.3	29	28.6	89.5	30	35	8.7	25	13
Recognition/ promotion of best teaching practices	Number of persons	13	12	1	3	4	2	7	1	2	2	9
	%	100	35.3	5.3	9.7	19	10.5	35	5	8.7	10	39.1
Professor's e-portfolio	Number of persons	2	3	2	1	3	0	2	1	2	1	6
	%	15.4	8.8	10.5	3.2	14.3		10	5	8.7	5	26.1

● Continuation of Table 5.3

1	2	3	4	5	6	7	8	9	10	11	12	13
Methodological seminars	Number of persons	10	11	13	22	12	16	8	8	12	10	9
	%	76.9	32.3	68.4	70.9	57.1	84.2	40	40	52.2	50	39.1
Feedback from fellow teachers	Number of persons	4	15	12	17	9	5	8	8	6	7	9
	%	30.8	44.1	63.2	54.8	42.9	26.3	40	40	26.1	35	39.1
Total, respondents	Number of persons	13	34	19	31	21	19	20	20	23	20	21
	%	100	100	100	100	100	100	100	100	100	100	100

Based on the results, presented in **Table 5.3**, we established that Ukrainian universities do not have a sufficiently powerful arsenal of forms for teaching competence development of their research and teaching staff. First of all, these are methodological seminars (in 7 universities the indicator is higher than 50%); in the second position – elective trainings/courses to improve teaching (in 6 universities the indicator is higher than 50%); in third place – feedback from fellow teachers (in 2 – the indicator is higher than 50%); the fourth position was taken by research on teaching and learning in higher education and recognition/promotion of best teaching practices (in 1 (SSU) – the indicator is higher than 50%).

At the same time, no university has received more than 50% of such forms for teaching competence development as mandatory training/courses to improve teaching and professor's e-portfolio. Among other options for teaching competence development of research and teaching staff, mentioned by the respondents, was self-study of best practices and success cases of other HEIs.

In our opinion, the lack of attention of university management to recognition/promotion of best teaching practices has a negative impact on the motivation of research and teaching staff to improve the teaching quality.

The analysis of universities by categories showed that considerable attention to teaching competence development of research and teaching staff is paid in the classical SSU and in technical – NAU and LNTU. We believe it is caused by the university administration awareness that in order to train a high-quality specialist, higher education professors must have not only scientific and professional knowledge, but also strategies, technologies and methods of transferring this knowledge as well as mastering the basics of pedagogical skills.

We defined the following distribution of answers to *Question 4 “What motivational/stimulating tools are used in your HEI for professional development?”* (**Table 5.4**).

The results of the survey prove the fact that various tools of personnel and financial policies are used in Ukrainian universities to stimulate the RTS' professional development. The analysis of respondents' responses to the motivating/stimulating tools, used in universities to develop

the RTS' scientific and pedagogical potential, showed that these are mostly honors (49.4%) and cash bonus (44.9%). In 5 universities this indicator is higher than 50%, while such forms as salary increase and contract duration did not gain more than 50% in any of the universities (25.9%).

● **Table 5.4** Tools for motivating/stimulating professional development of research and teaching staff, in number of persons, %

University	Cash bonus		Salary increase		Honors		Contract duration		Total	
Number of persons, %	Quant.	%	Quant.	%	Quant.	%	Quant.	%	Quant.	%
SSU	13	100	4	30.8	7	53.8	6	43.8	13	100
UzhNU	21	61.8	14	41.2	12	35.3	4	11.8	34	100
ChNU	2	10.5	3	15.8	7	36.8	5	26.3	19	100
NTU "KhPI"	12	38.7	13	41.9	10	32.3	13	41.9	31	100
LNTU	12	57.1	5	23.8	18	85.7	4	19.1	21	100
NAU	12	63.2	2	10.5	17	89.5	8	42.1	19	100
KNEU	3	15	9	45	9	45	1	5	20	100
KhNUE	4	20	4	20	10	50	6	30	20	100
NPU	11	47.8	2	8.7	8	34.8	3	13	23	100
NMUV	6	30	3	15	7	35	4	20	20	100
NUWEE	13	56.5	4	17.4	15	65.2	8	34.8	23	100

As we can see from the data, the most common tool, used in local universities to stimulate the development of RTS' scientific and pedagogical potential, is honors. Second place on the list of such incentives are "bonuses", although the assessment of the level of using this tool for stimulating managers and professors/researchers differs significantly (64% vs. 44%).

In our opinion, the low level of using this mechanism is due to the lack of appropriate professional standards or professional profiles of research and teaching staff with appropriate descriptors.

The analysis of the universities' activity by categories showed that the greatest attention is paid to the use of various forms of motivating/stimulating the development of RTS' potential in such universities as classical SSU and technical – NAU, LNTU and NUWEE. At the same time, these mechanisms are insufficiently used in classical ChNU, pedagogical NPU and medical NMUV.

The fifth question of our survey aimed to clarify the data that the HEI administration considers when evaluating research and teaching staff's professional achievements. The analysis of respondents' answers to this question is summarized in **Table 5.5**.

● **Table 5.5** Information (data), considered by HEI administration when evaluating research and teaching staff professional achievements, in number of persons, %

Forms of professional development		University										
		SSU	UzhNU	ChNU	NTU "KhpI"	LNTU	NAU	KNEU	KhNUe	NPU	NMUV	NUWEE
		Number of persons										
1	2	3	4	5	6	7	8	9	10	11	12	13
Survey of higher education students	Number of persons	13	5	2	12	13	15	5	11	–	1	4
	%	100	14.7	10.5	38.7	61.9	78.9	25	55	–	5	17.4
Achievements of higher education students	Number of persons	6	7	2	16	9	9	6	6	5	6	10
	%	46.1	20.6	10.5	51.6	42.9	47.4	30	30	21.7	30	43.4
Independent assessment of student learning outcomes	Number of persons	3	1	2	12	6	2	6	9	1	5	5
	%	23.1	2.9	10.5	38.7	28.6	10.5	30	45	4.4	25	21.7
Employers' assessment of professional qualifications/ professional training level of graduates	Number of persons	5	2	1	9	4	7	4	5	–	–	4
	%	38.5	5.9	5.3	29	19.1	36.8	20.0	25.0	–	–	17.4
Exam grades that the professor gives to higher education students	Number of persons	–	5	2	2	4	7	2	5	–	1	1
	%	–	14.7	10.5	6.5	19.1	36.8	10.0	25.0	–	5.0	4.4
RTS rating according to defined/ agreed indicators	Number of persons	9	24	10	10	9	16	9	11	7	1	10
	%	69.2	70.6	52.6	32.2	42.9	84.2	45.0	55.0	30.4	5.0	43.5
Publications in authoritative scientific journals (included in scientific and metric databases)	Number of persons	13	24	15	27	18	17	10	16	10	13	18
	%	100	70.6	78.9	87.1	85.7	89.5	50.0	80.0	43.5	65.0	78.3
Total, respondents	Number of persons	13	34	19	31	21	19	20	20	23	20	23
	%	100	100	100	100	100	100	100	100	100	100	100

The obtained data testify to a significant dominance of those related to academic staff research activities in the practice of evaluating the professional achievements of research and teaching staff in Ukrainian HEIs, namely the indicator of "publication in authoritative scientific journals" is dominant and much higher compared to others (77% – managers; 79% – professors/researchers).

The second priority on the list of indicators for evaluating the research and teaching staff's (RTS) professional achievements is "RTS rating" (59%).

It is obvious that this indicator is more complex and more balanced, because in all possible variations it includes both achievements related to research activities as well as ones of RTS' teaching and other professional activities.

Regarding other indicators, proposed for the survey, we can note that "achievements of higher education students" (57% – managers; 39% – professors/researchers) and "survey of higher education students" (46% – managers; 36% – professors/researchers) have a significant impact on evaluating professor's "success" (and in particular, his/her teaching activities).

If the first indicator – "achievements of higher education students" – fixes the fact of "objective result" of the teaching and learning process (i.e., integrally reflects both the professor's effectiveness and the one of higher education students), the second indicator – "the survey of higher education students" – in fact states "the satisfaction level of the recipient of educational services/client", ensures compliance with the principle of being "student-centered" and "client-oriented".

As seen from the above data, evaluating the research and teaching staff professional achievements is weakly influenced by the "assessments of student learning outcomes" indicator (13% – managers; 14% – professors/researchers) that can be stated as a positive feature. But we see this process is weakly impacted by the "assessment by employers of professional qualifications/level of professional training of graduates" indicator (26% – managers; 18% – professors/researchers). We consider it, unfortunately, as a negative characteristic of evaluating higher education professors' professional achievements.

In general, according to this data block, the higher education practice in Ukraine states the presence of a fairly wide range of indicators, used by HEIs to evaluate the research and teaching staff professional achievements.

The following distribution of respondents' answers was received to *Question 6 "What methods are used in your HEI to determine individual needs of RTS's professional development?"* (Table 5.6).

It is obvious that in order to get the most objective picture of the professional development needs of research and teaching staff and to form a relevant proposal for meeting those needs, the HEI administration must use a wide range of tools.

The obtained data showed that managers rate the effectiveness of the process of assessing individual needs of research and teaching staff in Ukrainian HEIs higher than professors/researchers (ranges 42–22% vs. 33–14%).

Significant differences were also found in the positions of managers and professors/researchers on understanding the value/impact of different methods of assessing research and

teaching staff's individual needs, namely: managers consider the most "influential" method of analyzing survey results/learning outcomes of students (42%), that is, the approach when the professional development needs of research and teaching staff are determined indirectly on the basis of analysis of their teaching results. In turn, professors/researchers emphasize the importance of using "direct inquiry" and consider such methods as "results of RTS certification and/or while its conducting" (33%) and the method of "anonymous RTS surveys" (32%).

● **Table 5.6** Methods for determining individual needs of research and teaching staff's professional development, in Number of persons, %

University	Anonymous RTS surveys		Targeted RTS surveys (indicating exactly who and what is needed)		Submitting inquiries to a special HEI unit		Based on the results of RTS certification and/or while its conducting		Total, respon- dents	
SSU	4	30.8	11	15.4	6	46.2	–	–	13	100
UzhNU	4	11.8	5	14.7	6	17.6	12	35.3	34	100
ChNU	6	31.6	4	21.1	–	–	5	26.3	19	100
NTU "KhPI"	16	51.6	4	12.9	3	9.7	2	6.5	31	100
LNTU	9	42.9	5	23.8	1	4.8	6	28.6	21	100
NAU	16	84.2	1	5.3	1	5.3	4	21	19	100
KNEU	15	75	2	10	3	15	1	5	20	100
KhNUE	3	15	7	35	5	25	7	35	20	100
NPU	4	17.4	4	17.4	–	–	7	30.4	23	100
NMUV	7	35	5	25	2	10	4	20	20	100
NUWEE	7	30.4	7	30.4	7	30.7	11	47.8	23	100

Unfortunately, the survey highlighted the fact that Ukrainian HEIs either don't have or don't actively use practices when there are special units (such as "center for professional development", "center of mastering pedagogical skills") in universities to ensure the effective professional development of research and teaching staff. The direct functions of such a unit might include the one of surveying research and teaching staff's individual needs for professional development.

CONCLUSIONS

The results of generalizing the answers to the questionnaires showed that the development of academic staff's scientific and pedagogical potential is not yet a priority for Ukrainian universities and is attributed to the personal needs of research and teaching staff, although its results affect their selection for the position.

The research and teaching staff's urgent needs for the development of their scientific and pedagogical potential are: raising the prestige of scientific and pedagogical work and motivating professors to professional growth; reducing the workload; development of research and information infrastructure for professors' self-training, development of organizational-methodical and financial management mechanisms of research and teaching staff's professional development, monitoring its quality and evaluating its results.

To harmonize these needs with the priorities of the universities' institutional policy, the HEI management can be recommended to create centers for professional development/mastering pedagogical skills of research and teaching staff; to establish scientific-business, technological platforms on HEI basis; to open scientific departments at industrial enterprises within the framework of public-private partnership between HEIs and businesses; to involve scientists of research institutions in scientific research at HEIs; to develop and implement an effective system of stimulating research activities of university professors and to intensify their participation in national and foreign competitions and research and educational projects, aimed at professional growth; to develop regulations and initiate a competition in teaching or mastering scientific-pedagogical skills at the institutional (universities – I round) and all-Ukrainian levels (MES of Ukraine – II round), similar to "Teacher of the Year" competition.

Given the lack of efforts of local universities to ensure the continuous development of professors' scientific and pedagogical potential in the system of formal postgraduate education, we consider it appropriate to recommend research and teaching staff to be more actively involved in professional development in non-formal and informal education. This process is provided by normative and legal documents related to the professional development of academic staff (Law "On scientific and scientific and technical activities" [25], Law "On professional development of workers" [26], Guidelines for professional development of research and teaching staff [27], Procedures for advanced training of pedagogical staff and research and teaching staff [28], Human Development Strategy [29, 30], etc.).

The empirical material, obtained during our survey, and practical recommendations, provided as a result of its processing, can be used in developing institutional strategies and long-term development plans of Ukrainian universities in the context of expanding their academic and institutional autonomy and increasing HEIs scientific and pedagogical potential.

We see promising areas of further research in the study of the institutional foundations of the functioning and improvement of professional development systems for research and teaching staff of Ukrainian universities.

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