

## **Report on the results of the survey "Satisfaction of doctoral students with educational services"**

for 2018-2022 according to the educational program  
8D07103 "Electric power engineering" (6D071800 " Electric power engineering")

The Center for Quality Management and Accreditation in 2018-2022 academic years conducted a survey **"Satisfaction of doctoral students with educational services"** as part of the planned complex of questionnaires for all consumer groups.

**The purpose of the study** is to identify problems that arise in the process of teaching and scientific work among doctoral students of KTU (KSTU).

**The object** of the study was doctoral students of KTU (KSTU) 1-3 courses.

**Subject of research:** formed ideas of doctoral students about the organization of the educational process, the degree of satisfaction with its various characteristics.

To assess the satisfaction of doctoral students with the quality of educational services, a 5-point scale was used, where **5** – excellent; **4** – very good; **3** - good; **2** – satisfactory; **1** - unsatisfactory, bad.

The information obtained as a result of the survey among doctoral students was summarized and presented in the report.

57 doctoral students took part in the survey, including:

The main part of the respondents were 2nd–year doctoral students – **65%**, and **17.5%** of 1st–year doctoral students took part; **17.5%** of 3rd-year doctoral students.

The form of the questionnaire consisted of evaluation criteria that determine the satisfaction indicators of doctoral students (Table 1).

**Table 1**

Criteria and indicators of satisfaction of doctoral students

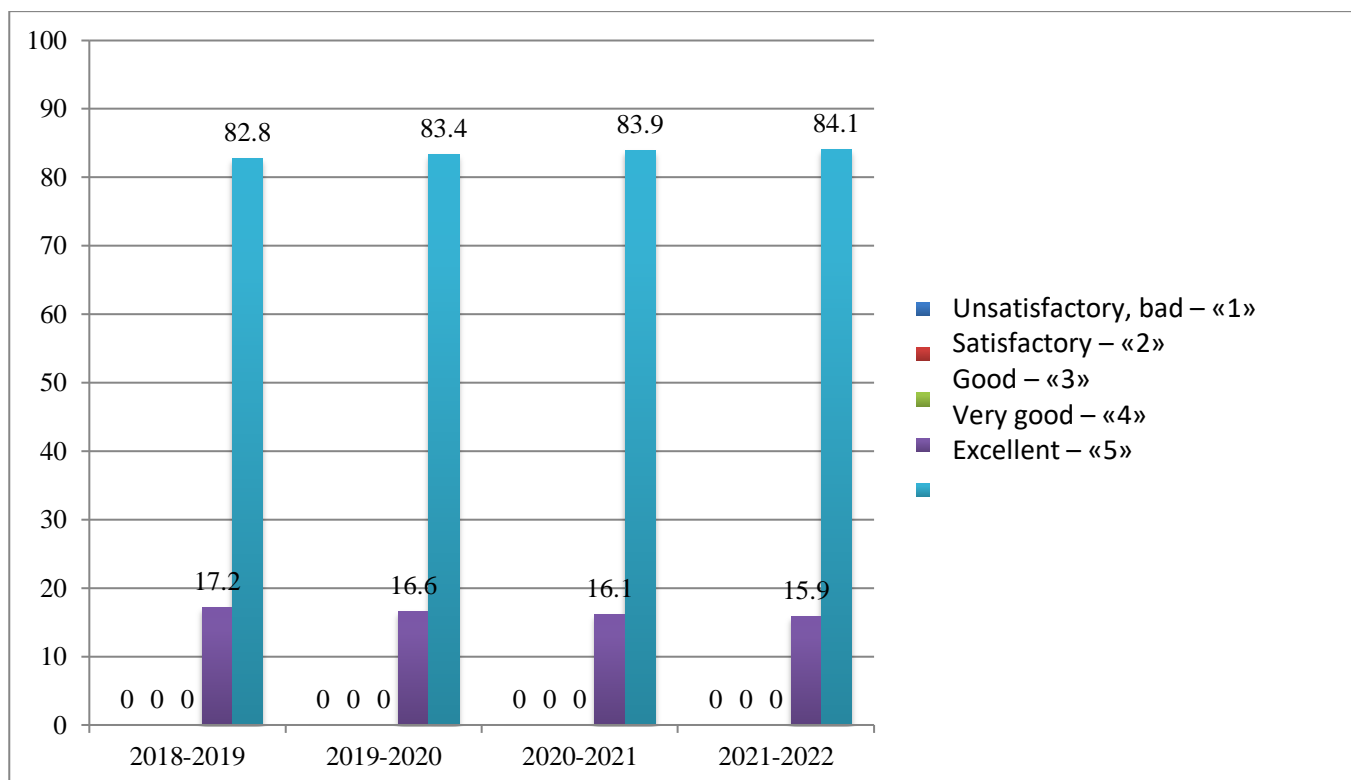
№	Evaluation criteria	Evaluation of the criterion, point				
		1	2	3	4	5
1	Actuality and relevance of the proposed topic of the dissertation research to your scientific interests					
2	The level of organizational, methodological and informational support for the preparation of a dissertation research					
3	Professionalism and competence of the supervisor					
4	Possibilities of approbation and publication of the results of the dissertation research					
5	Access to participation in cathedral research projects, including funded					
6	The University's responsiveness to your requests					
7	Availability, completeness and reliability of information about scientific events held at the University and beyond					
8	The general level of organization and conduct of an internship abroad					
9	The effectiveness of a foreign internship for you					

According to the results of the survey, the following data were obtained:

### 1. Relevance and relevance of the proposed topic of the dissertation research to your scientific interests

Table 1

	2018-2019	2019-2020	2020-2021	2021-2022
Unsatisfactory, bad – «1»	-	-	-	-
Satisfactory – «2»	-	-	-	-
Good – «3»	-	-	-	-
Very good – «4»	17,2	16,6	16,1	15,9
Excellent – «5»	82,8	83,4	83,9	84,1



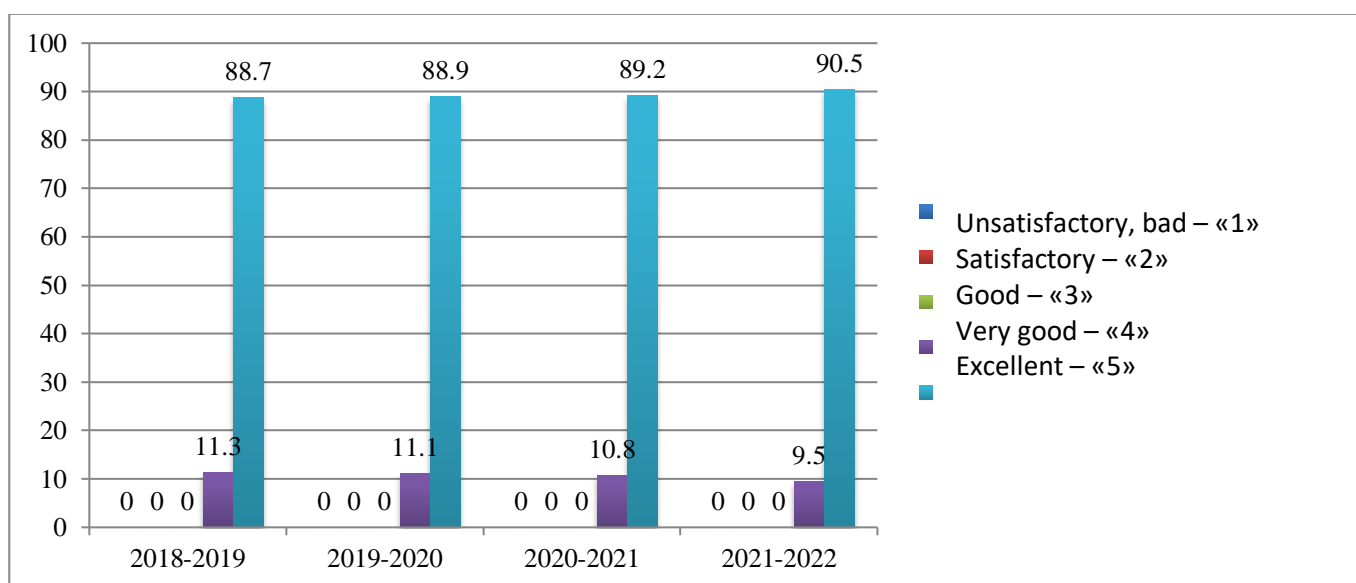
The relevance of the research topic is one of the main requirements of the Higher Attestation Commission for dissertation research. The relevance of the dissertation topic is determined by the need for its scientific and practical study, and should correspond to the scientific interests of doctoral students. **83.5%** of respondents rated this criterion as "excellent", **16.5%** as "very good".

The above high percentage indicates that doctoral students clearly define the subject of their dissertation research in order to achieve their goals in solving certain tasks.

## 2. The level of organizational, methodological and informational support for the preparation of a dissertation research

Table 2

	2018-2019	2019-2020	2020-2021	2021-2022
Unsatisfactory, bad – «1»	-	-	-	-
Satisfactory – «2»	-	-	-	-
Good – «3»	-	-	-	-
Very good – «4»	11,3	11,1	10,8	9,5
Excellent – «5»	88,7	88,9	89,2	90,5



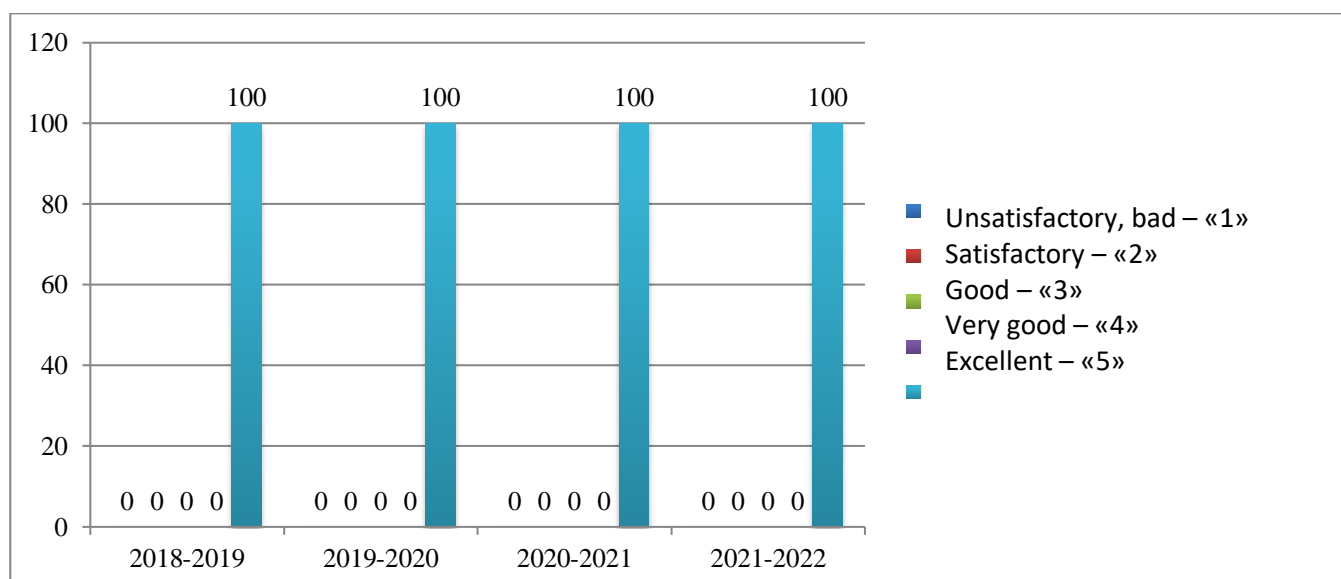
Educational, methodological and informational support of the educational process should guarantee the possibility of high-quality mastering by doctoral students of the educational program of doctoral studies. The implementation of the educational program should be provided with free access to international information networks, electronic databases, library collections, and computer technologies, educational and methodological and scientific literature. Information and educational and methodological support is carried out with a consistent emphasis on the independent work of doctoral students. The study showed that **89.3%** of respondents were completely satisfied, **10.7%** of respondents rated it "**very good**". The above indicators

of doctoral students indicate that the information resources provided by the university in the areas of doctoral training are generally sufficient and accessible.

### 3. Professionalism and competence of the supervisor

Table 3

	2018-2019	2019-2020	2020-2021	2021-2022
Unsatisfactory, bad – «1»	-	-	-	-
Satisfactory – «2»	-	-	-	-
Good – «3»	-	-	-	-
Very good – «4»	-	-	-	-
Excellent – «5»	100	100	100	100



The most important factor in the productive study of doctoral students and the easy passage of all stages of the defense is the choice of a supervisor. A lot depends on the experience in managing other doctoral students, as well as high professionalism and competence in the scientific community. Therefore, the question of his choice is the most relevant for future doctoral students.

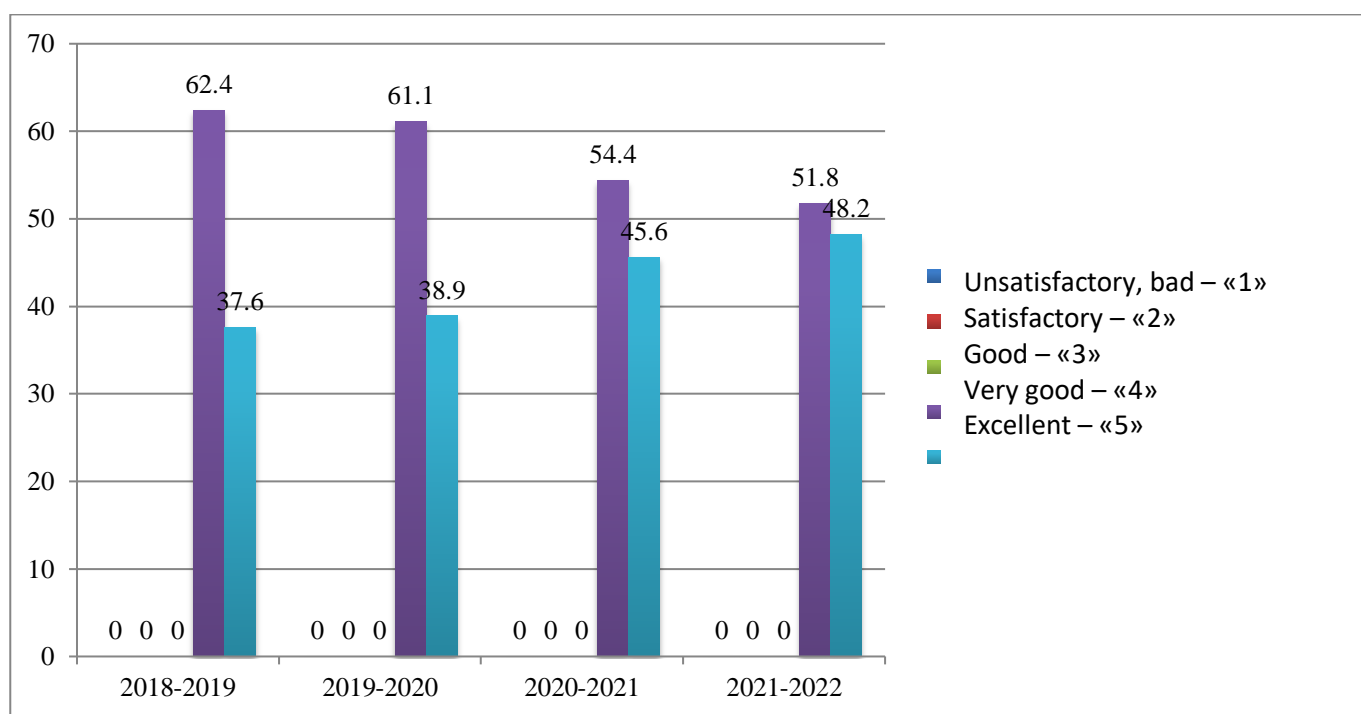
The conducted research revealed the level of professionalism and competence of scientific supervisors. According to the results of the survey, it can be noted that the doctoral students highly appreciated the professionalism and competence of the supervisor - **100%**. This indicator indicates that the scientific supervisors of doctoral students of the university have the following competencies, such as: rich experience of scientific work, its organization, deep scientific knowledge, settling down, they are also able to coordinate the preparation of a doctoral student to obtain the necessary knowledge and skills, to advise a doctoral student on theoretical, methodological, stylistic and other

issues of writing a dissertation, to form a schedule the work of a doctoral student and monitor its implementation, etc.

#### 4. Possibilities of approbation and publication of the results of the dissertation research

Table 4

	2018-2019	2019-2020	2020-2021	2021-2022
Unsatisfactory, bad – «1»	-	-	-	-
Satisfactory – «2»	-	-	-	-
Good – «3»	-	-	-	-
Very good – «4»	62,4	61,1	54,4	51,8
Excellent – «5»	37,6	38,9	45,6	48,2



An important section of the introduction to the dissertation is the so-called approbation of the research results. Approbation encourages the doctoral student to rethink his scientific research, refine it more deeply, and helps the author to confirm or understand the need to revise scientific provisions. **42.5%** of doctoral students "*Opportunities for testing and publishing the results of dissertation research*" at an "**excellent**" level, according to **57.5%** of respondents at a "**very good**" level.

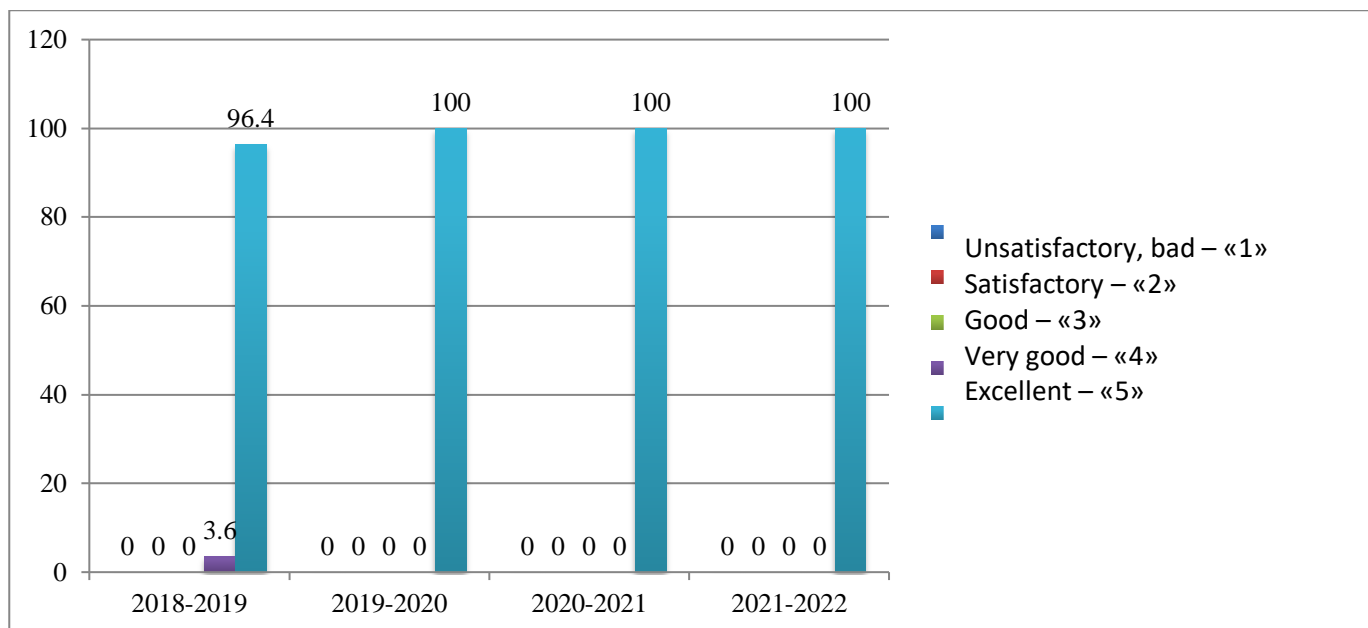
It is obvious that the approbation of the work in order to obtain timely objective assessments of the stages of the research, conclusions and practical recommendations should begin from the very beginning of work on the dissertation research, immediately

after the approval of the thesis topic. It is safe to say that successful testing is the key to the success of the research itself. Unfortunately, quite often doctoral students put the approbation and implementation of the results of their research on a par. Although, these concepts cannot be called synonyms. Often, in the texts of abstracts and dissertations, they write, for example, as follows: "The approbation and implementation of research results were carried out through publications, the author's participation in conferences, practical work as a teacher in schools ...". The results can be disseminated through publications, and the results can be discussed and disseminated through participation in conferences. And only through actual practical work is it possible to test the results, but it still needs to be justified. The most common ways to bring the materials of the dissertation work to the scientific community are the participation of a doctoral student in scientific conferences, symposiums, speeches at meetings of the department, participation in various types of events of the scientific community, preparation and sending proposals on the topic of research to various bodies.

## **5. Access to participation in cathedral research projects, including funded**

Table 5

	2018- 2019	2019- 2020	2020- 2021	2021- 2022
Unsatisfactory, bad – «1»	-	-	-	-
Satisfactory – «2»	-	-	-	-
Good – «3»	-	-	-	-
Very good – «4»	3,6	-	-	-
Excellent – «5»	96,4	100	100	100

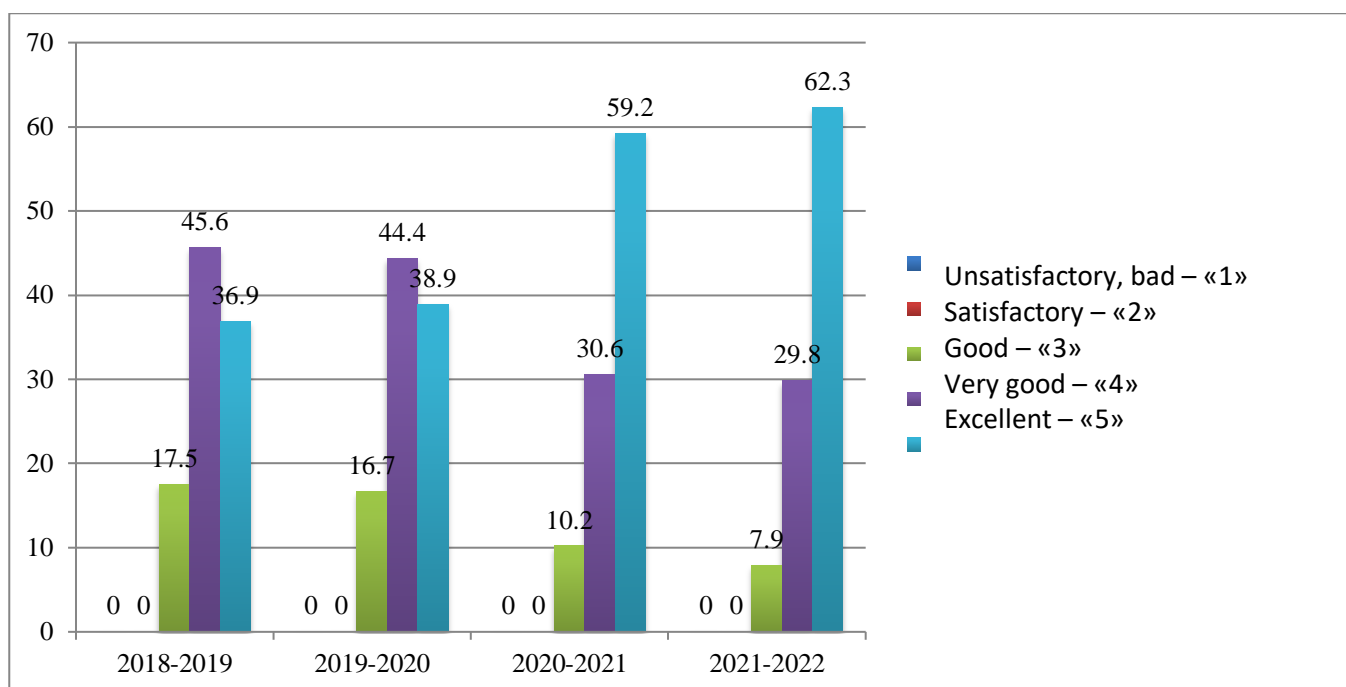


"Access to participation in cathedral research projects, including funded ones" was rated **"excellent"** by the majority of **99.1%** of doctoral students, **0.9%** of respondents rated **"very good"**.

## 6. The University's responsiveness to your requests

Table 6

	2018-2019	2019-2020	2020-2021	2021-2022
Unsatisfactory, bad – «1»	-	-	-	-
Satisfactory – «2»	-	-	-	-
Good – «3»	17,5	16,7	10,2	7,9
Very good – «4»	45,6	44,4	30,6	29,8
Excellent – «5»	36,9	38,9	59,2	62,3



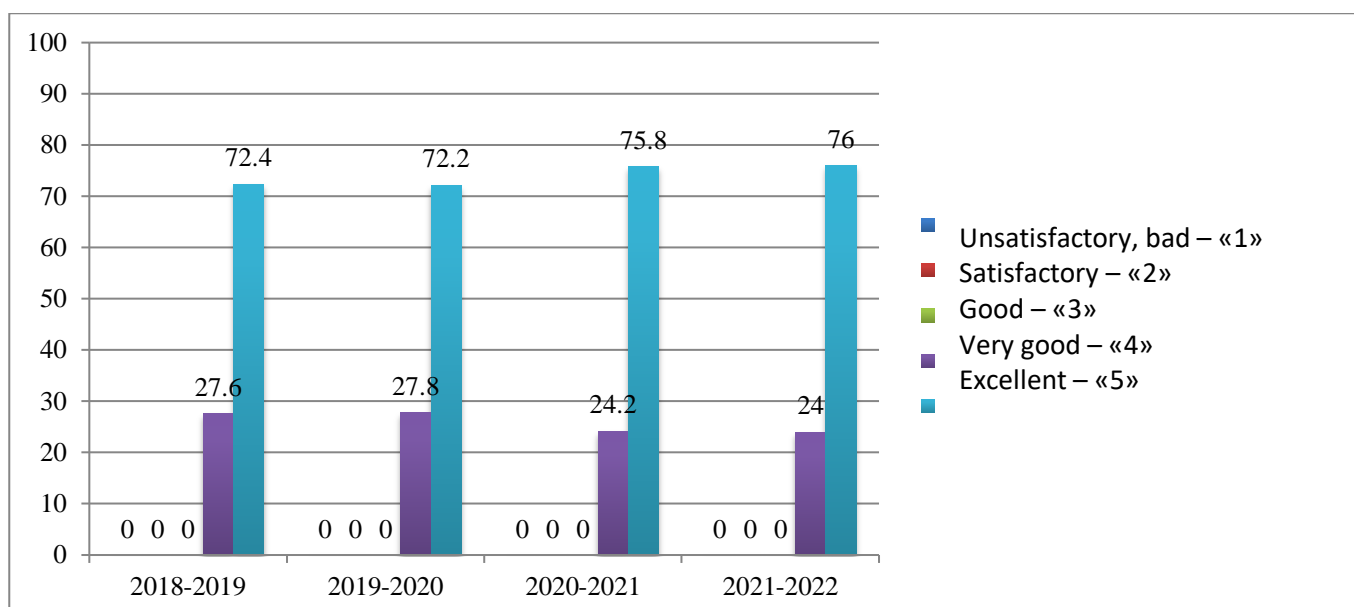
More respondents received answers to their requests from the university: **"excellent"** - 49.3%, **"very good"** - 37.6%. A small part of respondents – **13.1%** rated it **"good"**. We can say that the responsiveness of the University to the requests of doctoral students is at the highest level. The actual requests of students, including doctoral students, are an indicator of the ways of further development of education, socio-economic and socio-cultural spheres of society. The study of requests in the process of studying at the university allows us to analyze the subjective factors that determine the activity of the student's personality, describe the nature of her educational activity, track the formation of mechanisms regulating the processes of functioning and development of the student's personality, both in the field of education and beyond.

## 7. Availability, completeness and reliability of information about scientific events held at the University and beyond

Table 7

	2018-2019	2019-2020	2020-2021	2021-2022
Unsatisfactory, bad – «1»	-	-	-	-
Satisfactory – «2»	-	-	-	-
Good – «3»	-	-	-	-
Very good – «4»	27,6	27,8	24,2	24
Excellent – «5»	72,4	72,2	75,8	76



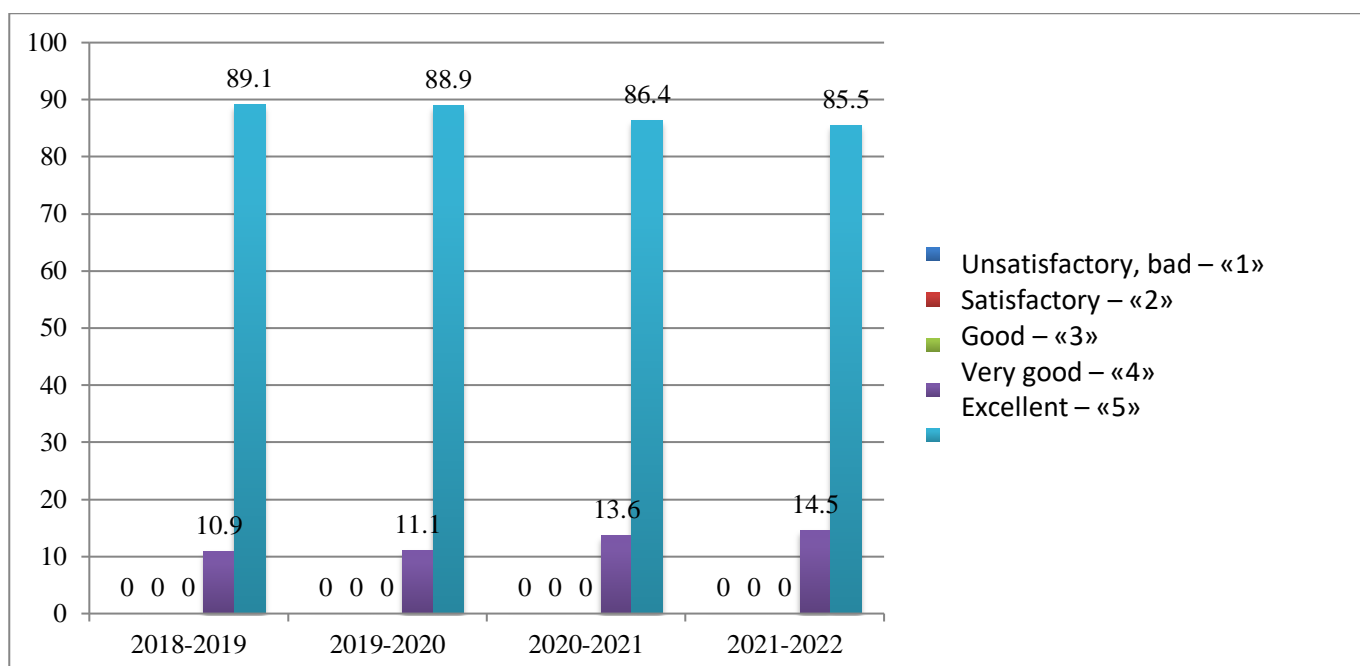


**74.1%** of respondents chose the answer **"excellent"**. A comparatively smaller number of responses were selected from the series **"4" - good - 25.9 %**. Information about scientific events held at the University and beyond for all students is received through the university's website, and via e-mail to the address of scientific departments - to all heads of departments and those responsible for the scientific work of students. This means that an insufficiently high level of satisfaction is due to the fact that doctoral students are inattentive to incoming information. This assumption needs to be clarified during further research.

## 8. The general level of organization and conduct of an internship abroad

Table 8

	2018-2019	2019-2020	2020-2021	2021-2022
Unsatisfactory, bad – «1»	-	-	-	-
Satisfactory – «2»	-	-	-	-
Good – «3»	-	-	-	-
Very good – «4»	10,9	11,1	13,6	14,5
Excellent – «5»	89,1	88,9	86,4	85,5



A foreign internship is a mandatory component of the doctoral program. More than **87.5%** of doctoral students demonstrate full satisfaction with the level of organization and conduct of foreign internships, significant satisfaction – **12.5%** of doctoral students. The data obtained prove the highest level of planning and organization of foreign internship of doctoral students at the university.

In accordance with the individual work plan of a doctoral student, in order to get acquainted with innovative technologies and new types of production, it is mandatory to undergo a scientific internship in scientific organizations and (or) organizations of relevant industries or fields of activity, including abroad".

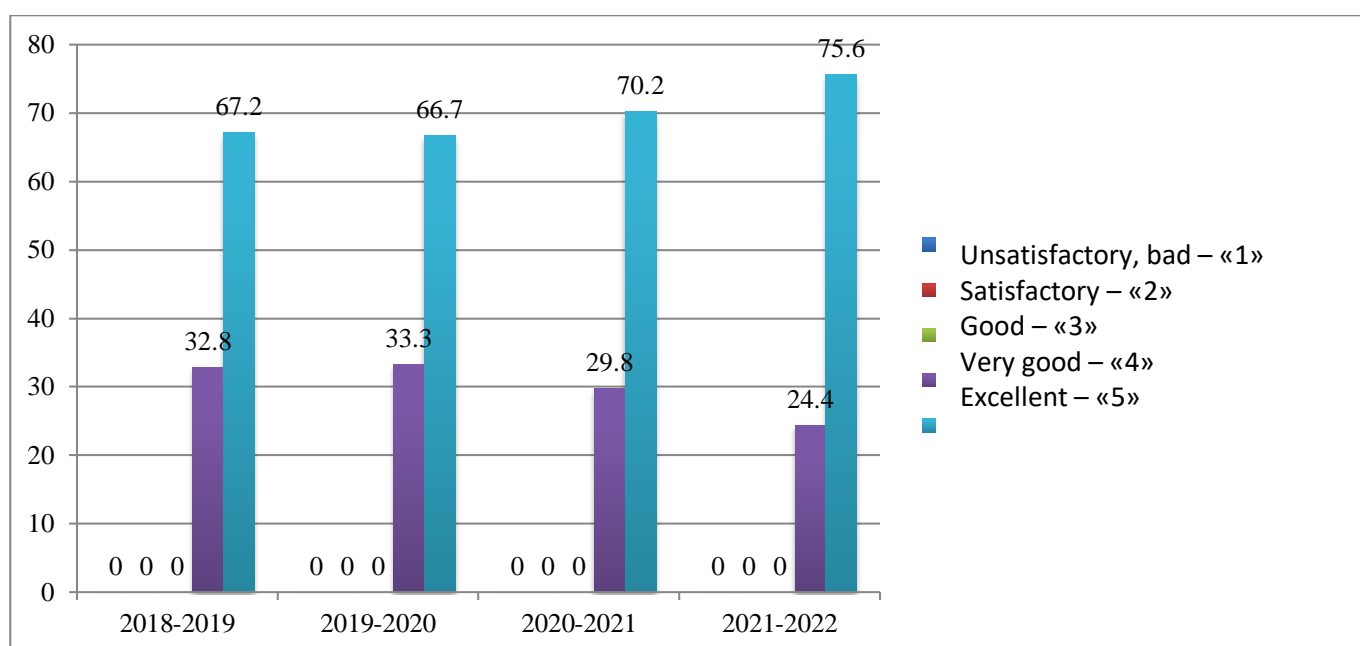
However, it is worth noting that before the introduction of restrictions on foreign internships of students in connection with the coronavirus pandemic, doctoral students, as a rule, passed a scientific internship at the place of work of a foreign scientific consultant at a foreign university or research center. After the introduction of the pandemic, scientific internships of doctoral students took place in Kazakhstan scientific organizations or organizations of relevant industries or fields of activity, or online in Kazakh and foreign universities.

## 9. The effectiveness of a foreign internship for you

Table 9

	2018-2019	2019-2020	2020-2021	2021-2022
Unsatisfactory, bad – «1»	-	-	-	-
Satisfactory – «2»	-	-	-	-
Good – «3»	-	-	-	-
Very good – «4»	32,8	33,3	29,8	24,4

Excellent – «5»	67,2	66,7	70,2	75,6
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According to the 9th criterion, a fairly high level of ratings (in the predominance of "5") was set by doctoral students for the effectiveness of a foreign internship for doctoral students. That is, doctoral students, upon completion of their foreign practice, master the latest achievements of world science, form practical skills of scientific and professional activity in a specific branch of science.

**At the end of the questionnaire, respondents were asked to compose questions that, in their opinion, should be added to this questionnaire to determine the assessment of the organization of the educational process, the quality of education and other areas of the university's activities. The following data were obtained:**

**Table 10. Proposals of doctoral students to supplement the survey questions.**

1st course	2nd course	3rd course
	Is the laboratory base of the university satisfactory?; Successfully defend the diploma; Equipment of laboratories; There are no questions, everything is fine	
	The use of students at various events as extras, the frequency of unnecessary seminars, advice, etc.	Material and technical equipment of the university for research
Self-assessment	On employment and practice	

*\*The answers of the doctoral students are provided in the original. The spelling and punctuation of the author are preserved*

## **Conclusions:**

1. In general, the results of the survey indicate a high degree of satisfaction of doctoral students with the educational services of KTU, grades varied between the scores **"good" - 3** and with a predominance of **"excellent" - 5**.

2. The relevance of the presented topics of the dissertation research fully corresponds to the scientific interests of doctoral students - **83.5%** of respondents rated **"excellent", "very good" - 16.5%**.

3. The respondents' answers confirmed the expected interdependence of the assessment of the professionalism and competence of scientific supervisors and the levels of organizational, methodological and information support for the preparation of a dissertation research. The information resources provided by the university in the areas of doctoral studies are generally sufficient and available when preparing a dissertation research: - **89.3%** rated **"excellent"** and **10.7%** rated **"very good"**. Highly appreciate the professionalism and competence of scientific supervisors: **100%** are completely satisfied and give the maximum rating to this criterion.

4. Possibilities of approbation and publication of the results of the dissertation research, rated: **57.5%** - **"very good"**, **42.5%** - **"excellent"**.

5. **99.1%** of respondents are fully satisfied with the availability to participate in cathedral research projects, including funded ones.

6. When assessing the responsiveness of the University to the requests of doctoral students at the university, there is a noticeable discrepancy in assessments: according to **49.3%** of doctoral students at an "excellent" level, for **37.6%** - at a "very good" level, for **13.1%** - at a "good" level.

7. The accessibility, completeness and reliability of information about scientific events held at the University and beyond are assessed by respondents quite well: **74.1%** of respondents are completely satisfied, **25.9%** are satisfied%.

8. From the point of view of doctoral students, the overall level of organization and conduct of foreign internships at an excellent level is **87.5%**. The level of effectiveness of the foreign internship was rated "excellent" - **69.9%**, "very good" - **30.1%**.

9. Recommendations of doctoral students on improving the questionnaire for determining the organization of the educational process, assessing the quality of training and other areas are presented in the following areas: The level of satisfaction of doctoral students with the laboratory base of the university; Material and technical equipment of the University for research; Employment and practice.

## **Recommendations:**

1. The Center of Quality Management to consider the proposals of the doctoral student to correct the questionnaire questions.

**2.** Pay attention to the material and technical equipment of the university for research.