











FACT-FINDING COUNTRY REVIEW REPORT

Kazakhstan

"Promoting internationalization of research through establishment and operationalization of Cycle 3 Quality Assurance System in line with the European Integration (C3QA)"



TABLE OF CONTENTS

Introduction	3
CHAPTER 1. OVERALL LANDSCAPE – NATIONAL HIGHER 1. RESEARCH AND QA CONTEXT (WITH FOCUS ON DOCTORA	* * * * * * * * * * * * * * * * * * * *
1.1 Brief presentation of the HE and research system	4
1.1.1 National statistics on higher education in Kazakhstan	4
1.1.2 National statistics on research and role of the HEIs within the priorities. Role of other actors.	•
1.1.3 Relationships between higher education and enterprises	8
1.2. Brief presentation of the doctorate level	8
1.2.1 The organization of the doctoral level in the country	8
1.2.2 Number of HEIs providing Cycle 3. Fields of interest at natio research and delivery of doctoral programmes, award of qualification	
1.2.3 National statistics on Doctorate studies	11
1.2.4 Major deficiencies identified and to be addressed within the p	project12
CHAPTER 2: NATURE AND CHARACTERISTICS OF DOCTOR	RATE STUDIES13
2.1 Information on Doctorate program design	13
Case of KAZGUU University	13
Case of SKSU	15
2.2 Characteristics of the Cycle 3 study	17
Case of KAZGUU University	17
Case of SKSU	20
2.3 Positioning of Cycle 3	25
Case of KAZGUU University	25
Case of SKSU	26
2.4 Follow-up of Doctoral Students and graduates	27
Case of KAZGUU University	27
Case of SKSU	28
CHAPTER 3: INTERNAL QUALITY ASSURANCE MECHANIS	MS 31
3.1 IQA mechanisms at institutional and Doctorate level	31
Case of KAZGUU	31
Case of SKSU	32
CHAPTER 4: EXTERNAL QUALITY ASSURANCE MECHANIS POLICIES	
4.1 National strategy in terms of Doctorate level and QA of Doctorate	e level: state of the art35
4.2 Future incentives for Cycle 3 at national level	36
4.3 External quality assurance policy	38

Introduction

The report gives an overview of positioning of Cycle 3 programmes in the system of higher education of Kazakhstan, as well as their implementation in practice and quality assurance. The data provided is taken from the national regulations, internal documents of HEIs, regulating delivery of Cycle 3 programmes, strategic development documents, policy statements, research papers, domestic and foreign reports on the given topic, and statistics of the state bodies.

The methodology used to conduct this review are qualitative and quantitative approaches, which were applied by two university partners, M.Auezov South Kazakhstan State University and KAZGUU University, in order to gather relevant data and analyze the current state of their PhD programmes delivery. These two case studies provide a comparative analysis of issues and opporunities faced by HEIs in the process of implementing PhD programmes in accordance with the best quality standards.

The universities gathered qualitative data from the interviews, as well as quantitative data from surveys, the results of which were used in the analyses and integrated in to the report. The interview and survey forms are provided in the Annex to the report.

Overall, the report contains 4 chapters:

Chapter 1: Overall landscape – National Higher Education (HE), research and QA context (with focus on Doctorate level);

Chapter 2: Nature and characteristics of doctorate studies;

Chapter 3: Internal quality assurance mechanisms;

Chapter 4: External quality assurance mechanisms and national policies.

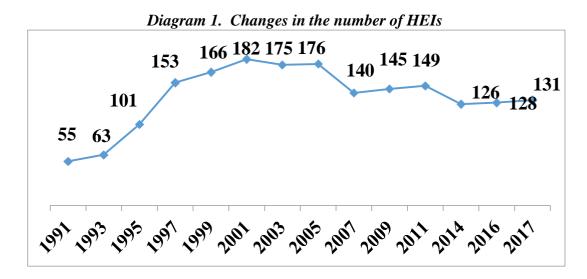
This report is a collaborative work completed by all participants from Kazakhstan: Independent Kazakh Agency for Quality Assurance in Education (IQAA), Ministry of Education and Science of the Republic of Kazakhstan (MoES), M.Auezov South Kazakhstan State University and KAZGUU University.

CHAPTER 1. OVERALL LANDSCAPE – NATIONAL HIGHER EDUCATION (HE), RESEARCH AND QA CONTEXT (WITH FOCUS ON DOCTORATE LEVEL)

1.1 Brief presentation of the HE and research system

1.1.1 National statistics on higher education in Kazakhstan

The total area of Kazakhstan is 2724.9 square kilometers. The population of Kazakhstan on March 1, 2017, is 17, 9 mln¹. There are 131 higher education institutions (HEIs) (Fig. 1): 10 national HEIs, 32 state HEIs, 14 non-civic HEIs, 1 international HEIs, 18 joint-stock HEIs, 55 private HEIs, 1 HEI in the authority of the Supreme Court of the Republic of Kazakhstan².



In 2016-2017, there are 477, 074 thousand Bachelor's students in 131 HEIs, there are 32, 893 thousand Master's students in 105 HEIs and 2, 710 thousand PhD students in 63 HEIs^{3,4,5}.

According to article 35 in paragraph 2 of the Law on Education of the Republic of Kazakhstan the main types of HEIs are: national research university, national HEI, research university, university, academy, institute and equivalent institutions (conservatory, higher school, specialized school). In addition, in 2011, new types of HEIs were indicated: research and national research universities, conducting individual study programmes of higher and postgraduate education in wide scientific areas and using outcomes of fundamental and applied research to generate and transfer new knowledge.

In Kazakhstan, the study programmes are conducted according to the Classificatory of Majors in Higher and Postgraduate Education. It contains 13 groups of majors, including 518 study programmes of which 157 Bachelor's programmes, 4 Specialist's programmes, 179 Master's programmes and 178 PhD programmes.

The higher education study programmes are divided into Bachelor's and Specialist's programmes. They are aimed at training of highly-qualified personnel according to demands of economic sectors. These programmes are intended at fundamental training of the students.

¹Committee on Statistics under the Ministry of National Economy of the Republic of Kazakhstan

² Ministry of Education and Science of the Republic of Kazakhstan. List of higher education institutions indicating the organizational and legal form (March 26, 2016).

³Committee on Statistics under the Ministry of National Economy of the Republic of Kazakhstan

⁴ Ibid

⁵ Committee on Statistics under the Ministry of National Economy of the Republic of Kazakhstan. Educational statistics. Bulletins for 2016

The duration of the study at the Bachelor's level with awarding the degree of "Bachelor" is not less than 4 years. It requires accumulation of 129 credits of theoretical study and a minimum of 6 credits of professional practice. The duration of Specialist's programme with awarding a qualification "Specialist in corresponding area" is 5 years, which requires accumulation of 167 credits.

According to the Law on Education, postgraduate education can be pursued on the basis of higher education. It is delivered on Master's, residency and PhD levels at national HEIs and research institutions, foreign HEIs via state scholarship "Bolashak" in line with a list of annually approved majors (Law on Education, article 36, para 1, 2).

The structure of the postgraduate study programmes contains theoretical training of core and specialized disciplines, professional practice, research (experimental-research) in the frame of the dissertation.

The duration of the Master's study programmes (taught route), awarding the academic degree "Master" in a corresponding major is 2 years. These programmes require accumulation of 55 credits. At professional route of the master's programmes the duration of study is 1 year, which requires accumulation of 24 credits.

The duration of study at PhD level is 3 years, for which the students need to acquire 75 credits. Dissertation is part of the PhD programmes requirements. It should contain theoretical provisions, that can be qualified as a new research achievement or solution of the research problem. The PhD programmes are delivered in two routes:

- 1. research-pedagogical with the duration of 3 years;
- 2. professional route with the duration of 3 years (the Law on Education, art. 36, para 4).

The PhD study programmes are delivered in line with:

- the list of majors and qualifications that the HEIs eligible to deliver;
- state compulsory standard of postgraduate education (SCSE);
- standard curricula;
- standard training programmes and syllabi;
- academic calendar;
- individual working plan of the doctoral candidates.

The PhD study programmes are legally eligible to be delivered by those HEIs, which obtain the license giving the right to conduct educational activities in the relevant specialties of doctoral study programmes, regardless of departmental subordination and ownership, and those having a contract with accredited research partner organizations to implement relevant research and study programmes and provide a research base.

The general duration of the academic year is 36 weeks. The academic period contains a term of 15 weeks.

Research is conducted on the basis of the following regulations:

- Law "On Education";
- Law "On Science";
- State Programme for Education and Science Development for 2016-2019;
- State compulsory standard of the Republic of Kazakhstan 5.01.024-2008 "The Research Activity";
 - State compulsory standard of higher education;
 - State compulsory standard of postgraduate education;
 - Rules on accreditation of research and (or) research-technical institutions;
 - Provisions on the contest "Leading Faculty Member";
 - Provisions on the Republic contest of students' research work.

Additionally the research is regulated by internal documents, developed by HEIs, for instance, Statute, Strategic development plan, provisions on "Student's research work", individual plans of the teaching staff, plans of the academic units on research, calendar of research activities, thematic plans on research, individual plans on research work of PhD candidates and Master's students.

In general, the research activities are assessed by the quality assurance mechanisms, which include particular criteria. They are as follows: the scope of the funded research, the amount of the grants, allocated to research, the number of obtained patents, published academic articles as well as academic articles, published in peer-reviewed journals, citation of the articles and monographs of the teaching staff in cooperation with international organizations and institutions in CIS and Kazakhstan, the number of Master's and PhD students, defined in individual plans, reports on research, the number of students, involved in research, the effectiveness of the students' research.

National Qualifications Framework

A key step in the modernization of the education system was the development and implementation of the National System of Classifications (NSC), which was legally approved in 2012 in the Labor Code of the Republic of Kazakhstan. The NSC is aimed at solving the problem of the discrepancy between the professional level of graduates of HEIs and the labor market.

The structure of the NSC contains the national qualifications framework, the sectoral framework of qualifications, professional standards, the system for assessing and certifying the quality of qualifications. As can be seen from the figure 2, the National Qualifications Framework (NQF) is an integral part of the NSC, which is in line with the Education Law of the Republic of Kazakhstan and the European Qualifications Framework, comprise the following eight qualification levels:

- 1-2 levels general secondary education;
- 3-4 levels technical and vocational education (upper level);
- 5 level technical and vocational education (middle ranking specialist), then secondary or higher education;

6 level – higher education;

7-8 levels – higher and postgraduate education (Bachelor's, Master's and PhD degrees).

The NQF provides a structural description of the requirements for personal and professional competencies, skills and knowledge. They are detailed in the sectoral qualifications framework and professional standards. Drawn on the NQF, the followings are developed:

- professional standards;
- study programmes;
- requirements for learning outcomes of the study programmes;
- procedures for determining the qualifications of graduates of all levels of professional education⁶.

Currently more than 20 sectoral qualifications frameworks, 345 professional standards were developed on the basis of the NQF. In partnership with the National Chamber of Entrepreneurs, professional standards are being improved, work is continuing on the establishment of independent centers for issuing qualifications.

⁶ National Qualifications Framework. Approved by the protocol of March 16, 2016, by the Republican Tripartite Commission on Social Partnership and Regulation of Social and Labor Relations

Ministry of healthcare and social National qualifications development of the RK +Ministry of framework education and science Sectoral public authorities Sectoral public authorities +employers Sectoral qualifications NATIONAL SYSTEM OF Ministry of healthcare and social framework development of the RK+ Ministry of OUALIFICATIONS education and science Sectoral public authorities +employers Professional standards Ministry of healthcare and social development of the RK+ Ministry of education and science Ministry of education and Educational standards, science+employers programs Ministry of investments and development+Ministry of healthcare and Assessment of social development of the RK +Ministry of qualifications' level education and science

Figure 1. The structure of education system of the Republic of Kazakhstan

1.1.2 National statistics on research and role of the HEIs within the research system, research priorities. Role of other actors.

employers' and employees unions

The implementation of scientific research in the Republic of Kazakhstan is carried out in accordance with the National priorities for research for 2014-2016 approved by the Higher Scientific and Technical Commission under the Government of the Republic of Kazakhstan and includes the following directions:

- Rational use of natural resources, processing of raw materials and products;
- Power engineering and machine building:
- Information and Telecommunication Technologies;
- Life Sciences;
- Intellectual potential of the country;
- Nuclear research and technology;
- Space research and technology;
- Biotechnologies;
- New materials and nanotechnologies;
- Technologies in the field of oil and gas;
- Social sciences.

In the framework of the competition for grant financing of research for 2015-2017, 5749 projects of higher education institutions, research institutes, other organizations and individuals were submitted. 4884 of them were approved and sent to the state scientific and technical expertise. The dominant number of applications is presented in 3 directions: "Intellectual potential of the country" (32.1%), "Rational use of natural resources, processing of raw materials and products" (26,6%), "Life Sciences" (20,4%). Then there are presented "Information and Telecommunication Technologies" (11,2%) and "Power engineering and machine building" (9,7%).

Higher education institutions of the Republic Kazakhstan submitted 2702 applications (55.3%), research institutes - 1892 applications (38.7%), other organizations - 254 and individuals -36.7

In recent years, Kazakhstan has pursued a policy of convergence between universities and national research institutes that have always functioned under the National Academy of Sciences.

⁷ The National Report on Science, 2016, Astana. Source: http://nauka-nanrk.kz/ru/assets/фото%202016%20июнь/Нацдоклад_2016_Pyc.%20яз.-испр.pdf

As part of the integration of academic and research institutes, some of the structural subdivisions of the National Academy of Sciences have been transferred to universities (Al-Farabi Kazakh National University, K.Satpayev Kazakh National Research University).

In addition, Kazakhstan's leading universities have their own research institutes that carry out fundamental and applied researches. For example, M. Auezov South Kazakhstan State University has 9 scientific institutes and 11 scientific centers.

1.1.3 Relationships between higher education and enterprises

All study programmes of Cycle 3 contain at least 6 Kazakhstani credits for an internship. In accordance with the regulatory requirements, doctoral studies include the following types of internship: pedagogical, research or industrial.

Types and duration of internship depend on the programme profile:

- 1) The programmes of the research and pedagogical direction envisage undertaking pedagogical and research practice (the total duration is 8-10 weeks);
- 2) The programmes of the profile direction provide pedagogical and industrial practice (the total duration is 8-10 weeks).

All types of doctoral internships are conducted in accordance with the academic calendar and a PhD student's individual plan.

The state policy in the field of training doctoral candidates is aimed at matching the PhD research to the industrial and innovative development of the country's economy and practical implementation of the results of PhD research in the real sector of the economy.

In 2001, the Law of the Republic of Kazakhstan "On Science" was adopted and in 2003 - the Law "On Innovation" was introduced in the Republic of Kazakhstan. Subsequently, the Law "On Science" was finalized and adopted in a new edition in 2001. This marked the beginning of the development of the university science in the country. The main university activity along with the educational one was appointed to be scientific, scientific-technical and innovative. The programme documents stipulate the integration of education, science and production. The key aspect of the law is the creation of conditions for the commercialization of the results of researches and development of universities on their own. In 2015, the Law of the Republic of Kazakhstan "On commercialization of the results of scientific and (or) scientific-technical activities" was adopted.

To fulfill the tasks, doctoral students have free access to the innovative infrastructure of universities. In Kazakhstan there are 16 Commercialization Offices, 3 Technoparks and 4 business incubators. State expenditure on research in Kazakhstan is 0,16% from GDP, while in OECD countries this indicator is 2,4% (expenditure on science).

Scientific researches are conducted by 18 laboratories at universities. At 15 universities there are laboratories of engineering profile and at 3 universities - national scientific laboratories for collective use (Satpayev University, Al-Farabi Kazakh National University, D. Serikbayev East Kazakhstan state technical university, Gumilev Eurasian National university, etc.). At 11 basic universities taking part in the State Programme on Industrialization and Innovation -2, 24 new laboratories were established.

Nazarbayev University is to be the flagship in realizing the principle of the triunity of education, science and production. The integrated scientific system includes such schools as Astana National Laboratory and Nazarbayev University Research and Innovation System (NURIS). One of the priority tasks is the creation of the intellectual and innovative cluster (research centers, commercialization office, business incubator, technopark and science park Astana Business Campus).

1.2. Brief presentation of the doctorate level

1.2.1 The organization of the doctoral level in the country

PhD doctorate training is conducted in a full-time form. The term of study is 3 years.

Annually applications for PhD programme are taken from June 20 to July 20, entrance examinations are held from August 1 to August 20.

Citizens of the Republic of Kazakhstan and stateless persons entering the doctoral programme, except for foreigners, take entrance examinations 1) on one of the foreign languages (English, French, German); 2) on specialty.

If an applicant has a required level of foreign language knowledge and provides the international certificate indicating the level of language proficiency, he/she is exempt from the exam and put the highest score (100):

Table 1. Language proficiency requirements for PhD applicants

№	Foreign Language	Threshold scores
1.	English	IELTS – not less than 6.0
		TOEFL – not less than 560
		TOEFL ITP – not less than 460
		TOEFL IBT – not less than 87
2.	German	DSH, Niveau C1/ C1 level
		Niveau C1/ C1 level
3.	French	TFI – not lower than B1 level on reading and listening
		DELF- B2 level
		DALF – C1 level
		TCF – not less than 400 scores

Entrance examinations are conducted in state, Russian or foreign languages according to the technology developed by the National Testing Center of the Ministry of Education and Science of the Republic of Kazakhstan.

The applicants who gained the highest scores not less than 150 out of maximum 200 (100 points per exam) may study under state grant. Doctorate is a fee-based for foreign investigators, at the request of universities, research institutes, enterprises and organizations and for specialized doctorate and DBA at the request of employers.

The educational programme of the PhD is of a scientific and pedagogical orientation and involves fundamental educational, methodological and research training and in-depth study of disciplines in the relevant areas of science.

The structure of the doctoral studies includes two components: educational and scientific, defining the content of education.

The educational programme of the doctoral studies includes:

- 1) theoretical training, including the study of the cycle of basic and profiling disciplines;
- 2) practical training: various types of professional practices, academic internships;
- 3) academic research (experimental) work, including writing of a doctoral thesis;
- 4) intermediate and final attestation.

The doctoral student is trained in accordance with his individual work plan, which is compiled under the guidance of scientific supervisors.

The study at doctorate level should be based on innovative technologies and interactive teaching methods.

The academic component of the educational programme includes academic research work, experimental work, academic publications and the writing of a doctoral thesis.

The educational process is considered to be completed when a doctoral student captures at least 75 credits, not less than 15 credits should be gained on theoretical training, as well as at least 5 credits on practice and at least 50 credits on research (which means doctoral dissertation completion as well).

The doctoral student who has mastered the full theoretical course of the doctoral programme, but has not fulfilled the research component, is given another opportunity to re-master the credits of the scientific component and to defend the thesis in subsequent years on a fee basis.

The doctoral programme should include:

- 1) pedagogical and research practice for students under the PhD programme (at least 3 + 2 credits);
- 2) industrial practice for students under the programme of profile doctoral studies (5 credits). Pedagogical practice can be conducted during the period of theoretical course without interruption from the educational process, this doctoral students can be involved in conducting lessons in the bachelor's and master's degrees.

The research practice of the doctoral student is conducted with the aim of studying the latest theoretical, methodological and technological achievements of domestic and foreign science (foreign internship is provided), as well as consolidating practical skills, applying modern methods in the research, processing and interpreting experimental data in the thesis.

The terms of the foreign internship are determined by the university independently.

The final result of the research and experimental work of the doctoral student is a doctoral dissertation.

The direction of the dissertation research, as a rule, should be connected with national priorities or state programmes, or programmes of fundamental or applied research.

1.2.2 Number of HEIs providing Cycle 3. Fields of interest at national level. Role of HEI in research and delivery of doctoral programmes, award of qualifications.

As it is seen from the diagram below, there has been a gradual increase in the number of HEIs providing PhD study programmes from 41 in 2011 to 63 in 2016/2017. At the moment, the training of doctoral students is carried out by 63 Kazakhstani universities.

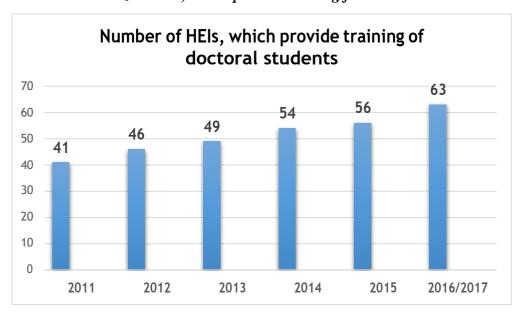


Diagram 2. Dynamics of growth in the number of higher education institutions in Kazakhstan, which provide training for doctoral students⁸

Doctoral studies are carried out only in full-time form within the framework of the state order approved by the Ministry of Education and Science. For 2013-2014 years, the state order was 520 places, 2014-2015 - 656 places, 2015-2016 - 623 places.

In some business schools, the DBA (Doctor of Business Administration) is being prepared. The duration of the doctoral studies programme is at least 3 years.

⁸ The Committee on Statistics under the Ministry of National Economy of the Republic of Kazakhstan

According to the state qualification of specialties (March 20, 2009), doctoral studies are conducted within 12 specialties: Education; Humanities; Law; Art; Social sciences, economics and business; Natural sciences; Technical sciences; Agricultural science; Services; Military affairs; Health care and social security (medicine); Veterinary Medicine.

Themes of PhD theses are chosen taking into account their topicality, demand for a region and the country, practical importance and the PhD student's scientific interests and potential. Themes pass several steps of discussion in academic and research community; they are discussed on the Scientific and Technical Council and approved on the meeting of the university's Scientific Council.

The themes are included into catalogues of university's research projects and presented to the business media for the investment. PhD students take advantage of service support to promote research results to the real sector of economics.

Research degrees in Ph.D and specialized Ph.D are awarded by the Committee for Control in Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan⁹ (hereinafter - the Committee) to citizens of Kazakhstan, foreign citizens and stateless persons who completed their doctoral studies, on the basis of applications of Dissertational Councils, taking into account the conclusions of the corresponding Expert Council, which is the advisory body of the Committee.

1.2.3 National statistics on Doctorate studies

Table 2. PhD degree statistics in Kazakhstan for 2012-2017, persons¹⁰

	2012	2013	2014	2015	2016/2017
Number of students	565	638	729	794	1086
starting a doctorate -					
overall					
Of whom – Professional	13	31	-	32	25
doctorate students					
Of whom – PhD students	552	607	729	762	1061
% of Male starting	227	251	260	748	391
doctorate					
% of Female starting	338	387	469	46	695
doctorate					
Students who dropped	62	87	76	93	77
out					
Of whom – Professional	4	22	6	3	38
doctorate students					
Of whom - PhD students	58	65		90	39
Preparation over the due	15	118	252	51	34
date					
Of whom – Professional	-	28	20	28	17
doctorate students					
Of whom - PhD students	15	90		23	17
Number of graduates -	257	373	503	533	619
overall					
% of Male graduates	124	172	189	233	231
% of Female graduates	133	201	314	300	388

⁹ Degree awarding rules. Committee for Control in Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan. Source: http://control.edu.gov.kz/ru/content/правила-присуждения-учёных-степеней

11

¹⁰ The Committee on Statistics under the Ministry of National Economy of the Republic of Kazakhstan

Number of thesis in co-	110	100	125	175	117
direction or bi-national					
direction					

As of 2016, the total number of doctorate students constituted 2,710, of whom 1 673 or 61.7% were female students. The number of professional doctorate students is 93 people and PhD students is 2 617 people. Thus, the number of PhD students has increased for 1.9 times in 5 years (the period of 2012-2016).

In the context of specialties, for a five-year period the majority of theses were defended within the programmes of "Social Sciences, Economics and Business" (170) and "Technical Sciences and Technologies" (95). The minimum number of theses was defended for the programmes of "Veterinary" (15), "Services" (7) and "Military Affairs and Security" (2), which can also be explained by a small number of admission and graduation of doctorate students in these specialties (Annex 1, Table 3).

Within a five-year period given in the table above, the lowest figures for graduation of doctorate students with thesis defense are presented for 2016 - only 18.9% of graduates defended their theses, which is almost half of the 2015 indicator (32.8%). In general, given the number of all graduates of the doctorate programme for 5 years, which is 2,285 people, the percentage of theses being defended for the entire period under consideration constitutes only 27.1% (Annex 1, Table 3).

On the basis of the OECD review report, the decrease of the number of PhDs with defense is mainly connected with ineffective distribution of time for PhD students' work on thesis, and with the insufficient involvement of foreign research supervisors. Thus, the State Compulsory Standard devotes only 30% of time for PhD student's research work activities.

1.2.4 Major deficiencies identified and to be addressed within the project

- 1. It is necessary to emphasize the work on providing services in the field of higher and postgraduate education in accordance with the requirements of the real labor market and the development of scientific research for the industrial-innovative economy.
- 2. There is a negative trend, expressed in an increase in the number of graduates of doctoral studies who did not defend the thesis in the allotted time. This trend is particularly pronounced in such areas as education, humanities, natural and technical sciences.
- 3. A need for analysis of the low level of thesis defense and the decision to eliminate this shortcoming is required;
 - 4. A need to considerably increase state grants for PhD students;
 - 5. Development of separate standards for the accreditation of PhD programmes;
- 6. Development of a mechanism to stimulate graduates of doctoral studies for employment in research organizations and enterprises (social packages, bonuses);
- 7. There are certain difficulties for introducing the research results into the industry environment. This is due to the weak interest of domestic enterprises in the introduction of innovations;
- 8. Low probability of publication of doctoral candidates' scientific articles in magazines with a high impact factor, caused by various requirements of scientific journals of the CIS countries and Western countries.

CHAPTER 2: NATURE AND CHARACTERISTICS OF DOCTORATE STUDIES

2.1 Information on Doctorate program design

Case of KAZGUU University

KAZGUU University provides two Ph.D. programs, particularly Ph.D. in Law and Ph.D. in International Law. Both programs are taught in Russian and last for three years. First year of study is primarily dedicated to coursework, while within last two years Ph.D. students undergo an international internship, conduct their own research projects, teach some courses at undergraduate level and write up their dissertations. Overall, Ph.D. programs are designed to ensure that PhD students receive advanced study in the chosen discipline and acquire skills to do independent research.

Overall, the curricula for the programs are designed by appointed Program Coordinators in collaboration with the faculty from the Graduate School of Law of KAZGUU University and the staff from the Graduate Education Department of the University, which is responsible for the administrative regulation of doctoral programs. Before implementing a Ph.D. program into practice, it has to be approved by the Research Counsel of the University.

The analysis of the curricular of doctoral programs of KAZGUU University showed commonalities in structure. Thus, each curriculum is divided into 6 modules correspondent to 6 semesters and comprises 180 ECTS. First two semesters are dedicated to coursework - mandatory courses (30 ECTS) and elective courses (30 ECTS). During the third and forth semesters students are to undergo an international internship in a partner university and teaching practice (60 ECTS). In the fifth semester students carry out their own research and take some preparatory courses for final doctoral examinations (30 ECTS). The last semester of the program is for writing dissertation and taking final doctoral examinations. After passing final examinations Ph.D. students can be allowed to go to viva - dissertation defense.

The curriculum designing procedure aims to tackle the issue of providing students with all the necessary theoretical background related to the field of study and research skills for conducting independent research later within the dissertation writing stage. Consequently, first semester coursework is presented by the following courses:

- 1) For law Ph.D. students: Methodology of legal science, Doctoral thesis seminar, English for legal studies;
- 2) For international law Ph.D. students: Methodology of international law science, Research, analysis and writing in international law, Research, analysis and writing in comparative law, Doctoral thesis seminar, English for legal studies.

As it is evident from the analysis, international law Ph.D. students are more exposed to methodological coursework (three courses are offered) than law Ph.D. students. The pie chart below illustrates the structure of Ph.D. programs (Diagram 1).

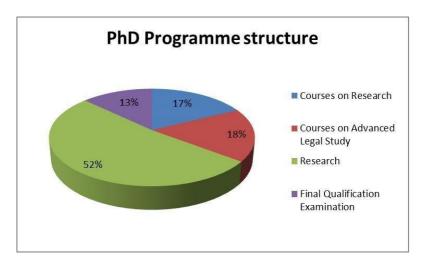


Diagram 3. PhD programme structure.

All the necessary organizational information related to Ph.D. programs, such as academic calendar, class schedule, and syllabi, are placed into the electronic system PLATONUS. Every Ph.D. student has an access to the system via his or her personal account.

Both Ph.D. programs' learning outcomes are in line with the Dublin descriptors (the Bologna process), European and National Qualification Frameworks, and The University Strategy 2016-2020 and listed below:

- to demonstrate systematic understanding of the legal knowledge and ability to critically apply indepth theories, methodologies;
- to synthesize fundamental crucial issues related to the national\international law equipped with comparative analyze of international experience;
- to demonstrate advanced knowledge in certain field of law (Civil Law, Public Law, Criminal Law, Comparative Law;
- to identify certain research problem in a certain field of law\international law and implement it in research process;
- to identify new methods of research and their implementation and application in independent research activity in legal sphere;
- to apply legal critical thinking analyses, evaluation and synthesis of new findings into research;
- to demonstrate a mastery of skills and knowledge at a level required for teaching a discipline related to the field of law\international law.

Overall, Ph.D. programs offered by the university are targeted to accomplish requirements of the labor market by equipping graduates with research skills and advanced knowledge relevant for a professional field, as well as by establishing graduates' multidisciplinary competences through introduction of elective courses related to various subject fields of law.

It is worth mentioning that KAZGUU University Ph.D. programs are logically structured and fulfill all the requirements set up for similar programs in the State Standards on Doctoral Programs. However, university Ph.D. program documents do not give detailed information about key "milestones" in regard of dissertation writing process even if it is emphasized that the offered Ph.D. programs are research intensive. The only reference to the requirement concerning the schedule of conducting independent research by a Ph.D. student is the mentioning of the necessity to submit a draft paper of dissertation research at the end of the second year of the program. Such a mentioning of the "milestone" is not enough, because it does not outline what requirements such a draft has to meet. In other words, it is significantly important to elaborate detailed rubrics for the research paper draft submission.

This approach to direct Ph.D. students in conducting their own dissertation research will allow to support students and supervisors with guidelines, as well as to control their progress, hence to reduce the attrition rate of Ph.D. students.

Practices of formal learning

In-class work is a practical class work, which is carried out using various methods. The teacher is not particularly limited in the choice of the method. As part of the education variety of interactive methods is being used: the method of discussion, case method, method of playing legal and arbitral proceedings based on the models of International Court of Justice, the European Court of Human Rights, the UN Committee on Human Rights, the Dispute Settlement Body of the WTO, or ICSID arbitration, and the method of presentation of an essay or of a small-scale research project.

<u>Informal learning opportunities</u>

All year round the Department of Postgraduate Education and the Academy of Fundamental and Applied Research arrange guest-lectures, trainings, and workshops on various topics related to law issues taking place in contemporary world, as well as research methodology, and publication skills. Table 1 (see Annex 2) demonstrates information about guest-lecturers invited to KAZGUU University last year to deliver presentations on topics related to international law.

Apart from this, beginning from the second year of study Ph.D. students have an opportunity to undergo practice as a research assistant in one of the research institutes of KAZGUU University.

In the scope of this opportunity young researchers are involved into research projects and the expertise of legal documents.

Case of SKSU

The preparation of doctors of philosophy (PhD) and profile doctors in the Republic of Kazakhstan is carried out in accordance with the Classifier of specialties of higher and postgraduate education of the Republic of Kazakhstan, which includes the names of the directions and specialties of doctoral studies.

Educational programs of doctoral studies are developed by universities on the basis of the National and European Qualifications Framework (level 8) and are formed according to a modular principle. The process of preparing doctoral candidates is regulated by the State Obligatory Standard of Post-Graduate Education, approved by the order of the Ministry of Education and Science of Republic of Kazakhstan (MES RK) №1080.

The results of the training of educational programs are determined on the basis of the Dublin descriptors of the third level and are expressed through competences. The results of the training are formulated both at the level of the whole program and at the level of separate discipline.

The educational programs of the doctoral studies are aimed at getting the following competencies by the doctoral student:

- to demonstrate a systematic understanding of the field of study, mastery in the part of skills and research methods used in this field;
 - to plan, develop, implement and adjust an integrated process of scientific research;
- to contribute their own original research to the expansion of the boundaries of the scientific field, which may deserve publication at the national or international level;
 - critically analyze, evaluate and synthesize new and complex ideas;
- to share their knowledge and achievements with colleagues, with scientific community and the wide audience;
 - to promote the a knowledge-based development of society.
- The content of educational programs of doctoral education includes: theoretical training, including basic and profiling disciplines, practical training of doctoral students (various types of professional practices, scientific internships), research (experimental and research) work with writing a dissertation.
- Educational programs of doctoral studies are developed by a group of leading scientists of the corresponding department, under the supervision of the head of the department. In the process of formulating competences and learning outcomes, discussions are organized with representatives of employers. According to the proposals of employers, an elective discipline is developed (optional). Modular educational programs are considered at the meetings of the department, academic and industrial council of the faculty and are approved by the academic council of the university.

The structure of the educational doctoral program (PhD) contains two components: educational (20%) and scientific (80%).

The educational component includes disciplines of two cycles: basic disciplines (BD) and profile disciplines (PD). Each cycle includes the disciplines of the compulsory component and the elective component.

The scientific component is formed from the scientific-research (testing-experimental) work of the doctoral student, scientific publications and the writing of a doctoral dissertation.

Workload of the educational programs of doctoral studies is calculated in Kazakhstan credits KZ and ECTS and is equal to 75 KZ/112 ECTS.

Table 3. The content of the educational program of the doctoral studies

№ Name of disciplines and types of activities	'S
--	----

1	The cycle of basic disciplines (BD)	3	5
1)	Compulsory component (CC)	3	5
2)	Elective component (EC)	за счет ДВО	
2	The cycle of profiling disciplines (PD)	12	18
1)	Compulsory component (CC)	-	
2)	Elective component (EC)	12	18
	Theoretical training in total	15	23
3	Additional types of training (ATT)	not less than 55	82
1)	Practice (pedagogical, research or production)	not less than 5	7
2)	Scientific-research (experimental-research) work of the doctoral student (SRWD / ERWD)	not less than 20	30
3)	Execution of doctoral thesis	30	45
4	Final attestation (FA)	5	7
1)	Comprehensive examination (CE)	1	2
2)	Design and defense of a doctoral dissertation (DD)	4	6
	Total	Not less than 75	112

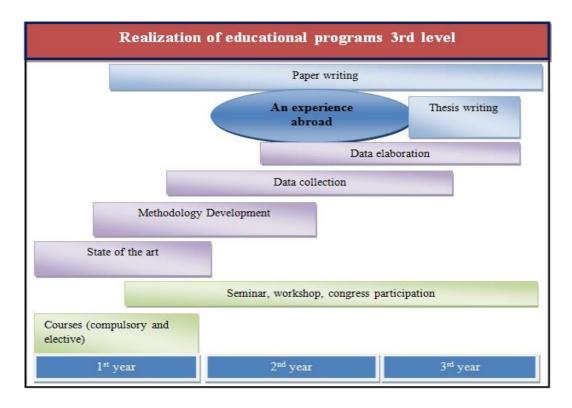
The volume of disciplines of the BD cycle is 4% of the total curriculum (3 credits), which refers to the compulsory component. The volume of the cycle of profiling disciplines (PD) is 16% of the total curriculum discipline (12 credits).

Disciplines are studied at the first year of study. Doctoral students study compulsory disciplines and elective courses (optional).

The list of elective disciplines is determined by the institution independently in accordance with the requests of the doctoral candidate, employers and the needs of the labor market.

Example. The educational doctoral program of the SKSU "Chemical technology of inorganic substances" includes, at the 1st year, the study of one compulsory discipline "Innovative technologies of inorganic substances - 5 ECTS" and 4 elective disciplines, for example "High-temperature processes in chemical technology", "Modern composite materials", "Nanotechnology in electrochemistry". At the 2 nd and 3 rd year of study, research and experimental work, work on the thesis are conducted. During the entire period of study, the doctoral students participate in scientific seminars, trainings.

The types of activity of the doctoral students are presented in Figure 2.



2.2Characteristics of the Cycle 3 study

Case of KAZGUU University

To improve provision of doctoral education, KAZGUU University established Graduate School that encompasses Master and PhD students. This department takes full responsibility for:

- Elaboration of PhD programs;
- Recruitments of PhD students;
- Running and delivery PhD programs;
- Arrangement of supplementary courses and workshops for graduate students;
- Mentoring PhD students' progress;
- Systematic evaluation of PhD programs._

Recruitment and admission procedure

The admission procedure is regulated according to the "The Standard Rules of Admission to Educational Institutions", which was adopted by the decree of the government of the Republic of Kazakhstan dated on January 19th, 2012, No. 109.

The University admits students of any race, color, national or ethnic origin, sex, age, disability, religion, sexual orientation, and gender identity to all the rights, privileges, programs, and activities generally accorded or made available to students at the University. Two categories of Ph.D. applicants are enrolled into KAZGUU University Ph.D. programs — owners of state grants (scholarships) and self-funded students. The Ministry of Education and Science of the Republic of Kazakhstan provides a financial aid by allocating state educational scholarships for candidates who met all the required criteria and demonstrated high academic performance.

The members of Admission Committee are typically assigned by the Rector of the University. In the period from April to June every year the staff of the Department give informative presentations about the admission requirements, entry examinations, and programs for potential applicants and those who are interested in postgraduate education.

Selection of candidates

To enroll into a Ph.D. program candidates have to take two examinations – foreign language examination and subject examination.

The examination commissions are formed for the period of entry examinations. The examination commission consists of the director, from 3 to 9 members and a secretary. All the members of the commission are permanent workers of the University, independent experts and specialists from other Universities which make the whole examination procedure more transparent and objective. Foreign language (English, German, French) entry examinations (Russian/Kazakh for international students) are held according to the technology and methodology developed by The National Testing Centre of the Ministry of Education and Science of the Republic of Kazakhstan. Candidates with international language examination certificates with appropriate band score are not required to take the language test.

The subject examination is set in the written form. The examination paper consists of 2 questions: the first one covers theoretical issues and the second one deals with finding a solution to a case.

Candidates are admitted to the PhD programs only if they get 50 points in each examination. Candidates, who get the highest points in the sum of two entry examinations of not less than 150 points, are awarded a state grant. In case the applicants have equal examination results, the one who got the highest points on the subject examination takes advantage. Besides the results of examinations Admission Committee also takes into account student academic achievements including publications of scientific articles, certificates on scientific innovations, scientific scholarships, grants, certificates of achievements, certificates of participation in the scientific conferences and competitions and work experience on the specialty.

The results of the entry examinations of applicants who are awarded with a grant are posted on the University website and also the detailed information board of the Department of Postgraduate Education. The points on each section of the exam of every applicant are given in the score chart.

Supervision

Ph.D. students are guided by a local supervisor and a foreign advisor. The local supervisor is chosen by the Ph.D. student himself/herself, while a foreign advisor is appointed by the Department of Postgraduate Education and approved by the Academy of Fundamental and Applied Research. Foreign advisors are chosen from partner universities and in respect of students' research topics.

Supervisor/advisor has to be a scholar in the field related to the PhD student's research or have publications in this field, as well as have previous experience in PhD supervision. Mostly local supervisors of current PhD students are Directors of Research Institutes of the University. Foreign advisor is appointed to Ph.D. student supervision with purpose to bring international experience into supervision and broaden international research experience of the Ph.D. student.

The University does not regulate any specific information about the requirements put before the main supervisors except of those mentioned above.

Dissertation requirements

All PhD students irrespective of their programs are required to submit and defend a dissertation describing their study conducted within PhD programs. Dissertation requirements are prescribed in the State Standards on Doctoral Programs approved by the Government of the Republic of Kazakhstan and dated back to August 23, 2012 (Order №1080) and State Regulations on Awarding Doctorate Degree (with amendments from 30 May 2013, №214). Unfortunately, there are no institutional policies or regulations prescribing clear requirements for writing a dissertation. Most often PhD students are lead and advised by their main, home-country supervisor as well as cosupervisor from abroad.

Dissertation committee

KAZGUU University has been having the Dissertation Committee (DC) for Law disciplines since 1996 by the appointment of the Ministry of Education and Science of the Republic of Kazakhstan (MES RK). The work of DC is arranged on the basis of the Regulation on the Dissertation Committee of KAZGUU University.

The members of the DC are assigned by Research Committee of KAZGUU University per each Ph.D. program annually. In general DC consists of not less than 5 members, three of whom have to be holders of a scientific degree and to publish five scholarly articles in a relevant field. Moreover, 1/3 of the DC members have to be full-time faculty of KAZGUU University, another 1/3 of the DC members have to be represented by faculty from other higher educational institutions of Kazakhstan, while the rest part of DC has to be comprised of representatives of research institutions or other organizations of the country. A Ph.D. student's supervisor is not included into the DC; he or she can attend the defense, but does not have a right to vote.

The dissertation submission procedure begins after passing Final State Qualification Examinations that are held by the State Committee at the end of the third year of the Ph.D. program. Once the dissertation is approved by DC, the dissertation is submitted to the Ph.D. State Committee of the MES for final approval. Only after MES's approval a candidate is awarded with a Ph.D. degree in Law/International Law.

All the information about upcoming dissertation defense events is uploaded into the University web-site. After the defense, the printed and soft versions of the dissertation are handed to the university's library as well as to the National Academic Library of the Republic of Kazakhstan and to the National Library of Kazakhstan by the DC Secretary.

Dissertation defense procedure

The defense of a dissertation is public (viva) and held either in Kazakh or Russian depending on the language used by the Ph.D. candidate. Committee members, who do not understand the language used during the defense, are provided with simultaneous translation. Usually, the dissertation defense is an official event when the Ph.D. candidate presents finding of his/her research to the scholarly community who are experts in the field to which the dissertation topic belongs. The defense procedure is recorded on a videotape, while the speech of the Ph.D. candidate is transcribed. There is no specific ceremonial presentation, such as gowns or proclamations; the only requirement is to have a presentation and hand-outs for the committee members.

Review board

In case the DC makes a decision by secret voting to return a Ph.D. candidate's work as unfinished and inappropriate to be rewarded with a scientific degree, the Ph.D. candidate can appeal to the Review Board within two months after the announcement of the decision of the DC. Within 10 days the University establishes a Review Board Committee consisting of three members and who are scholars with degrees in the field that is relevant to the dissertation topic. The decision of the Review Board Committee, either positive or negative, are sent to the MES for taking final decision about rewarding the degree to the Ph.D. candidate.

Internationalization

University practices addressing the issue of internationalization are presented in the form as follows:

- Introducing elective courses in English. Mostly they are elected by PhD students from International Law as English is one of the key requirements set up before International law undergraduates:
- Promoting supervision of PhD theses by international scholar from such countries as Russia, Poland, Germany, and others. In regard of this practice, it is believed that knowledge and experience of international scholars will not only increase quality of dissertations, but also bring new perspectives into PhD research projects and help emerging researchers establish network with researchers abroad;
- Within three year program PhD students are funded for one trip to co-supervisor. Such a short-term study trip lasts usually 1,5 month. During these visits PhD students have an opportunity to work in libraries of the universities where their supervisors work, discuss their research projects with co-supervisors, as well as attend any workshops and guest-lectures.

Case of SKSU

Organization of training for the Cycle 3. persons who have a "master" degree and successfully passed the entrance examinations: a foreign language and an examination in the specialty, are accepted to doctoral studies. Each exam is evaluated at a maximum of 100 points. A positive level is 50 points.

The examination in a foreign language (English, French or German) is conducted in the form of testing and includes: listening, writing, reading. For specialties requiring knowledge of the Arabic language, testing is conducted in Arabic.

Persons who hold international certificates are exempt from the entrance exam in a foreign language (TOEFL, IELTS, DSH, TFI, DELF, DALF, TCF).

Applicants who have the above mentioned international certificates confirming the knowledge of a foreign language are credited with the highest score on a 100-point scale of assessments, and they are exempt from passing the foreign language exam of the Ministry of Education and Science of the Republic of Kazakhstan.

The second exam is the exam on the chosen specialty, which is conducted by the university, which has a license for this specialty. The institution independently determines the form of passing exam in the specialty (test, writing, orally). For foreign citizens, entrance examinations include: examination in the state or Russian language and examination in the specialty.

For the period of entrance examinations in universities, examining commissions are formed, consisting of at least 3 members, one of which is the chairman. Retake entrance examinations in the year of their passing is not allowed.

To examine applications of persons who do not agree with the results of examinations, Appeal Commissions are formed in each institution. Appeal complaints are considered for the content of examination materials and for technical failures during the examination.

Admission to doctoral PhD. Persons who have received at least 50 points for each entrance examination take part in the competition for enrollment in doctoral studies. State grants to doctoral PhD are awarded to applicants who scored the highest scores on the sum of entrance exam scores.

If the applicants gain the same score, the advantage is given to persons who have the highest rating in the specialty. In the case of the same indicators of the exam in the specialty, the competitors who have the largest score in the foreign language will have an advantage. Then scientific achievements and publications on specialty, certificates on scientific developments, certificates on awarding scientific scholarships, grants, certificates / diplomas for participation in scientific conferences and competitions are taken into account.

Persons who have scored thresholds for entrance exams but who have not received a study grant are eligible to be trained on a paid basis through the formation of a contract for the provision of educational services.

The doctoral thesis is carried out under the supervision of 2 scientific supervisors, appointed from among doctors of science (habilitation doctors) and candidates of sciences, doctors of philosophy (PhD). One of the supervisors is a scientist from a foreign university. Scientific consultants can be individuals who are actively engaged in scientific research in this field of science (in the specialty profile) and have experience in scientific management.

Supervisors should ensure the organization of research work of doctoral student, its high-quality scientific and methodical statement.

The main criteria for choosing a supervisor are:

- ✓ the presence of an academic degree of Doctor of Science / Philosophy doctor (PhD) in the relevant specialty or doctor in profile in a specific field of science;
- ✓ scientific title of professor; active work in this field of knowledge and experience in the scientific supervision of PhD doctoral theses.
- ✓ supervisor should have at least 10 publications on the direction of doctoral studies in ranking international journals with a high impact factor.

The scientific advisers of the doctoral candidate carry out current control in the following forms:

- doctoral reports on the results of works performed;

- control of the level of training at each stage of the doctoral student's work;
- interview on the results of work performed in the form of on-line consultations;
- control of the performance of the dissertation and checking the training a doctoral student for the defense.

The supervisors give a written review on the doctoral thesis, in which they assesse the scientific level of the doctoral solution of the tasks assigned to him, the degree of his independence and creative activity in the performance of his doctoral dissertation, determines the level of general preparation of the doctoral candidate for professional activity.

Since 2017-2018, SKSU has introduced the practice of concluding contracts between the scientific supervisor and the doctoral student, regulating their rights and duties.

The doctoral dissertation is the scientific work of the doctoral student, which is an independent research in which theoretical positions have been developed, the totality of which can be qualified as a new scientific achievement, either a scientific problem is solved, or scientifically based technical, economic or technological solutions are introduced, the introduction of which makes a significant contribution to the development of economy of the country. Defense of the dissertation for a PhD degree is held at a meeting of the dissertation council in accordance with the Model Provision on the defense of doctoral dissertations, approved by the Minister of Education and Science of the Republic of Kazakhstan.

The thesis must meet one of the following requirements:

- 1) contain new scientifically grounded results that solve an important scientific problem;
- 2) contain new scientifically grounded results, the use of which ensures the solution of an important applied problem;
- 3) contain new scientifically grounded theoretical and (or) experimental results, the totality of which is of great importance for the development of specific scientific areas.

Doctoral dissertations are defended at the meeting of the dissertational council. Dissertational councils are created for 3 calendar years in the leading higher educational institutions of Kazakhstan. The Dissertation Council consists of the chairman, deputy chairman, scientific secretary and council members. The membership of the dissertational council is at least 5 people. The composition of the dissertational council for each specialty includes at least 3 specialists with a degree (candidate of science, doctor of science) or a PhD, a doctor in profile and at least 5 scientific articles in the relevant field of research.

At the same time, at least 1/3 of the members of the dissertational council should be full-time employees of the university, at least 1/3 - representatives of other universities, at least 1/3 - representatives of scientific or other organizations.

The university, in which the doctoral student was trained, provides a discussion of the doctoral thesis at the expanded meeting of the department and / or laboratories.

1 month before the extended meeting of the department, the thesis is sent to 2 specialists with a scientific degree in the scientific research of doctoral students.

At the enlarged meeting not less than 2/3 members of the department and / or laboratory, scientific advisers, as well as representatives of related departments, scientific and other organizations take part.

In the absence of consultants, their reviews on the thesis of the doctoral student at the meeting are read by the head of the department / laboratory.

The university, in which the doctoral student was trained, with a cover letter on the blank sheet of the university, presents the following documents to the thesis council:

- 1) reviews of domestic and foreign scientific supervisors (for dissertations containing state secrets, reviews of domestic supervisor);
 - 2) the positive conclusion of the extended meeting of the department and / or laboratory;
 - 3) a dissertation in hardcover and on an electronic medium (CD-ROM);
 - 4) a list of scientific papers and their copies.

Dissertation is presented in one of the following languages: state (Kazakh), Russian or English.

Dissertation council is cobet is guided by principle of independence of reviewers and scientific supervisors from each other.

After admission to the defense, the dissertation council sends a thesis to check whether the borrowed material is used by the doctoral student without reference to the author and the source of borrowing to the National Center of State Scientific -Technical Expertise (NCSSTE).

On the basis of the study of the thesis and published works reviewers submit to the dissertation council written reviews, which assess the relevance of the selected topic, the degree of validity of the scientific provisions, conclusions, recommendations formulated in the thesis and its practical significance, their novelty, and also gives an opinion on the possibility of awarding a degree of Doctor of Philosophy (PhD), a doctor in profile of the corresponding the specialty.

The meeting of the dissertational council is considered eligible if at least 2/3 of its members participated in its work, with mandatory participation in the meeting of at least 3 specialists in each specialty among the members of the dissertational council.

In case of the absence (for reasonable excuse) of one of the reviewers, their review is read out by the scientific secretary. Reviewers are allowed to speak at the meeting of the dissertation council in on-line mode in the form of a video conference.

The Dissertational Council holds a secret ballot to decide on a recommendation to the Committee of the Control in the field of Education and Science of Ministry of Education and Science of the Republic of Kazakhstan for awarding a PhD degree or PhD in profile in the relevant specialty to a doctoral candidate or recommendation on refusal to award this degree.

The decision of the dissertational council is considered positive if 2/3 or more members of the dissertational council who participated in the meeting voted for it. If less than 2/3 of the members of the dissertational council who participated in the meeting voted for a positive decision, a negative decision is taken.

When a negative decision is taken, the dissertational council draws up a conclusion in which it reflects what requirements the thesis does not meet. For consideration of complaints the university creates an Appeal Commission consisting of 3 specialists who has a degree in the relevant specialty. The commission examines the appeal application, the thesis, the materials of the dissertational council for the defense of the thesis and prepares an opinion on the results of the appeal within 30 calendar days from the date of its creation. The conclusion of the appeal commission is made by the members of the commission on the basis of an open vote by a majority vote and signed by all members of the commission.

The doctoral degree is awarded to a doctoral student who has fully mastered the educational program of the Cycle 3, passed the final examination in the specialty, who completed the research and wrote a doctoral dissertation and successfully defended it at the Dissertation Council.

Doctoral dissertations are carried out in compliance with the principles of independence, internal unity, scientific novelty, reliability and practical value and academic honesty.

Graduates of doctoral programs are allowed for the defense of the doctoral dissertation in case if they have at least 7 publications on the topic of the thesis, including: at least 3 articles in scientific publications included in the List of scientific publications recommended for publication of the main results of scientific activity by Committee of control in the field of education and science of MES RK; 1 article - in an international peer-reviewed scientific journal (Scopus/WoS); 3 - in the materials or theses of international conferences, including 1 in the materials of a foreign conference.

Articles in international peer-reviewed scientific journals are taken into account depending on the direction of training, namely:

- 1) by group of specialties Natural sciences, Engineering science and technology, Medicine, Agricultural sciences in editions with nonzero impact factor in the database of Thomson Reuters (Web of Science, Thomson Reuters) or those entering the database Scopus, Pubmed, zbMath, MathScinet, Agris, Georef, Astrophysical journal;
- 2) for the remaining groups of specialties in publications having a nonzero impact factor or indexed in the database of Thomson Reuters (Web of Science, Thomson Reuters) or those entering the database Scopus, JSTORE.

The articles published in the current issues of the journals during their indexing in these databases are considered and correspond to the thematic focus of the journal stated in the indicated databases. Publications in the materials of conferences indexed in the indicated databases are considered as materials of international conferences.

Foreign patents included in the Thomson Reuters database (Web of Science, Thomson Reuters), are considered as publications in international peer-reviewed scientific journals.

Decisions on the award of a scientific degree are taken by the Committee for Control in the Sphere of Education and Science of the Republic of Kazakhstan, to which the thesis and all materials on its defense are directed, within 4 months after the defense of the thesis at the doctoral council. The award of the doctoral degree by the Committee is carried out on the basis of expertise of the Expert Council. Expert councils are formed by the Committee in the areas of training doctoral students. The Expert Council includes experts with a scientific degree, having at least 5 publications in the last 5 years in peer-reviewed international scientific publications or copyright certificates, patents, intellectual property certificates, or 10 publications in publications recommended by the Ministry of Education and Science of the Republic of Kazakhstan.

In the case of refusal to award a philosophy doctor (PhD), a doctor in the profile the thesis is presented by the doctoral candidate for defense again, but not earlier than one year after the previous defense.

When making a negative decision on the Internet resources of the Committee and the university where the thesis was prepared, information is provided indicating the reason for making such a decision, as well as information on scientific advisers, the dissertation council and official reviewers. When making a negative decision on the dissertations containing state secrets, information on the Internet resources of the Committee and the university is not placed. When making a positive decision by the Committee after re-defense of the thesis, information about the negative decision is removed from the Internet resource of the university and the Committee.

On the decision of the dissertational council and the Committee on the refusal to award the degree of Doctor of Philosophy (PhD) or a doctor in the profile within 60 calendar days from the date of issuing the order the doctoral candidate can submit appeal. An appeal is submitted to the dissertational council, which decided to refuse to award a PhD, a doctor in the profile, or to the Committee. After the expiration of this period, the appeal is not accepted for consideration.

In the Republic of Kazakhstan, the training of doctors without interruption from production is not practiced. All doctoral programs are implemented in full-time mode and assume full employment of doctoral students in research laboratories and departments of the university. In a number of cases interpice workers who have experience in practical work enter the doctoral studies. This category of doctoral students carries out dissertation research on topics relevant to their place of work. After the completion of the doctoral studies, these graduates return to the enterprises and continue their professional activities at a higher scientific level.

In the process of training on educational programs of doctoral studies, doctoral students acquire the following skills:

1) have an idea:

- of the main stages of development and the change of paradigms in the evolution of science;
- of the objective, philosophical and methodological specifics of natural (social, humanitarian, economic) sciences;
- of the scientific schools of the relevant branch of knowledge, their theoretical and practical developments;
 - of the scientific concepts of the world and Kazakhstan science in the relevant field;
 - of the mechanism for introducing scientific developments into practical activities;
 - of the norms of interaction in the scientific community;
 - of the pedagogical and scientific ethics of the scientist-researcher;

2) knowledge and understanding:

- of modern trends, directions and patterns of development of national science in the context of globalization and internationalization;
 - of methodology of scientific knowledge;
 - of achievements of the world and Kazakhstan science in the relevant field;
 - (to understand and accept) the social responsibility of science and education;
- a foreign language for the implementation of scientific communication and international cooperation;

3) be able:

- to organize, plan and implement the process of scientific research;
- to analyze, evaluate and compare various theoretical concepts in the field of research and draw conclusions;
- analyze and process information from various sources;
- to conduct independent scientific research, characterized by academic integrity, on the basis of modern theories and methods of analysis;
- to generate their own new scientific ideas, share their knowledge and ideas with the scientific community, expanding the boundaries of scientific knowledge;
- to choose and effectively use the modern research methodology;
- to plan and forecast their further professional development;

4) have skills:

- of critical analysis, evaluation and comparison of various scientific theories and ideas;
- of analytical and experimental scientific activities;
- of planning and forecasting of research results;
- of oratory and public speaking at international scientific forums, conferences and seminars;
- of scientific writing and scientific communication;
- of planning, coordination and implementation of research processes;
- of a systematic understanding of the field of study and demonstrate the quality and effectiveness of selected scientific methods;
 - of participation in scientific events, fundamental scientific domestic and international projects;
 - of leadership and team management;
 - of responsible and creative attitude to scientific and scientific-pedagogical activity;
- of conducting a patent search and experience transferring scientific information using modern information and innovative technologies;
 - protection of intellectual property rights for scientific discoveries and developments;
 - free communication in a foreign language;

5) be competent:

- in the field of scientific and scientific-pedagogical activity in conditions of rapid renewal and growth of information flows;
 - in conducting theoretical and experimental scientific research;
 - in the formulation and solution of theoretical and applied problems in scientific research;
 - in conducting professional and comprehensive analysis of problems in the relevant field;
 - in matters of interpersonal communication and human resource management;
 - in matters of university training of specialists;
 - in the examination of scientific projects and research;
 - to ensure constant professional growth.

In order to ensure high quality of research and integration of Kazakhstan studies into the international academic space, one of the mandatory requirements is the assignment of a foreign supervisor from among professors with experience in training PhD doctors. Their role is in distance consulting of doctoral students, in direct supervision of the preparation of their thesis and reading of training courses at the invitation of the university and foreign internships of the doctoral student.

An obligatory element of the experimental program of doctoral studies is foreign scientific research intership of doctoral students. As a rule, a foreign scientific internship is organized at a

university or a research center where a foreign scientific supervisor conducts research activities on a full-time basis. The duration of the internship is 2-6 months. The internship is organized in the second year of study. Within the framework of the internship, the experimental part of the research is carried out, various experiments and tests are conducted, work with data bases is carried out, visits to lectures by leading lecturers from foreign universities and work in the library are organized. Doctoral students take part in research seminars and study the experience of experimental and research work of a foreign university.

Example. 2nd year PhD student of the specialty 6D072100 - Chemical technology of organic substances Anastassiya Kovaleva has attended the scientific research training at Munich Technical University, Germany, from 16 till 28 May, 2017. Under the supervising of famous scientist Prof. Hinrichsen, Dean of Chemistry Department of TUM, she performed a research on recycling of used motor oil: the amount of harmful substances in oil, the type of compounds were found out and the most effective way of their removal was determined. These experiments were carried out in modern laboratories of TUM and the results discussed with specialists - leaders in that field of study.

SKSU has an experience of academic mobility of doctoral students, including at the expense of financing the national budget or the program Erasmus +.

Example. The second year doctoral student of SKSU, specializing in "Technological Machines and Equipment", has studied the training courses "Machine Learning: neural networks and advanced models" (6 ECTS), "Mobile ad hoc networks and wireless sensor networks" (6 ECTS) and conducted experiments during the spring semester of 2016-2017 academic year at the University of Pisa (Italy).

Scientific degrees awarded abroad are subjected to the established procedure for recognizing the equivalence of the degree that the Committee for Control in the field of Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan conducts. The procedure consists of three stages: 1) establishing the authenticity of the document on the award of the degree; 2) the procedure for establishing the compliance of established professional educational programs (on full-time education) with Kazakhstan's state compulsory education standards for doctoral studies; 3) evaluation of dissertations for compliance with the requirements of Kazakhstan legislation.

At the same time, the recognition of the equivalence of PhD diplomas, doctorate by profile, persons who have defended dissertations and who have worked for at least 3 years in higher educational institutions included in the top 500 academic rankings (Shanghai Jiao Tong University, Times, QS) or top 200 national universities rating US News and World Report, is carried out only by establishing the authenticity of the document on the award of the degree.

2.3 Positioning of Cycle 3

Case of KAZGUU University

All conditions for the creative and research work of future scientists have been created at the University of KAZGUU. In the framework of training on doctoral programs, there are foreign internships, training sessions and consultations with well-known foreign academic professors.

The main features of PhD doctoral studies include:

- ensuring an optimal balance between training and research;
- obtaining broad scientific, educational and methodological training;
- the opportunity to obtain foreign experience in the work with a scientific adviser and internships.

Doctoral School of the University of KAZGUU assumes fundamental educational, methodological and research training and in-depth study of disciplines in narrow areas of science for the system of higher, postgraduate education and research sector.

The developed curriculum adequately reflects the qualification objectives of the training program. The courses included in the curriculum of the program were developed within the European Credit Transfer System (ECTS). The content of the modules is well balanced, logically linked and focused on obtaining the expected learning outcomes. Each semester consists of 30 ECTS credits, where each module includes a certain number of subject disciplines. The content of the doctoral program is focused on research. At the beginning of the course, students master the scientific competencies that lead to the implementation of research immediately after the first year of study. The program is implemented jointly with the Academy, which generates advanced scientific knowledge in the field of law. All these disciplines reflects needs of the society in Kazakhstan, as an examples from the last year program make an accent on English law, because of the implementation English law regulations into the International Financial Centre "Astana".

KAZGUU University work closely with Ministry of Justice, local courts and other law related authorities. We invite experts from various fields of law to help our PhD students with their research.

In KAZGUU University there is no official regulation regarding the employment of Doctoral workers

Case of SKSU

Professors having big experience and knowledge in a certain specialty integrate associates, researchers and young scientists of this direction in a research group. Doctoral students are involved into these groups and perform their research in the doctoral study under the leadership of the professor being a group member. Thus the doctoral students fulfill some part of the united complex research and interact with all group members. Usually they have common publications in research journals and patents. More over doctoral students participate in the implementation of research projects financed by the Ministry of Education and Science of the Republic of Kazakhstan; they carry out investigations in the project framework and include research results in their theses. In addition to that, doctoral students have to note the fact of their research fulfillment in the project framework in the introduction part of the theses.

Example. The SKSU is working to create a doctoral school for chemical engineering. Mechanisms are being developed to support doctoral students, the relationship between supervisors and doctoral students, financial support for doctoral students and their involvement in the implementation of grant scientific projects.

When Doctoral research subjects choosing the supervisor and the student previously study the problems of acting industrial enterprises in the South Kazakhstan and neighboring regions and then select the urgent problem to be solved concerning production intensification, technological mode optimization and harmful waste utilization. This problem solving is chosen as a subject of the doctoral research. So, this year the first year doctoral student Smailov Bakhyt of «Chemical technology of inorganic substances» specialty worked earlier for several years at the «Kazatomprom» enterprise located in Kyzylorda region and he is up in. Therefore the supervisor has chosen the theme «Research of extraction of associate chemical impurities from the production solution obtained by uranium ore sulphuric-acid leaching». Bakhyt would study this problem during his Doctoral research and then he would test research results in industrial conditions.

According to regulations for defense of PhD thesis on Chemical engineering direction Doctoral students have to perform compulsory industrial tests of the developed technology or improved technological modes. These tests are finalized as industrial test certificates applied to the PhD thesis.

The law of the Republic of Kazakhstan "About Education" allows studying in doctoral studies at the expense of private companies and enterprises/organizations. The condition of a working off after graduating HEI or scientific institutions is not less than 3 years for studied according to the state grant obligatory.

M. Auezov South Kazakhstan State University (SKSU) aims to provide orientation of doctor's researches to increase in efficiency of industrial sector of the country. For PhD students are set the

tasks for technologies development, having implementation, which leads to close connection between PhD students and the enterprises of the relevant sectors. Te results of researches are approved and used by the concrete enterprises in production process.

Example. By results of a dissertation research of Serikuly Zhandos PhD on specialty 6D072400 - Technological machines and equipment, on the subject "Development and Calculation the heat and mass transfer of devices with a mobile nozzle taking into account large-scale transition" on JSC Aktyubinsk Plant of Chromic Connections. The apparatus with a regular lamellar nozzle and the device for alignment of a gas stream is implemented (2012).

By results of a dissertation research of Kaldybayeva Botagoz PhD on specialty 6D072400 - Technological machines and equipment on the subject "Development and Calculation of the Combined Process and the Equipment for Purification of Gas Mixes of Carbon Dioxide and Hydrogen Sulphide" at the glass plant "Gazalkent Oyna" is introduced a hemosorber for cleaning and cooling of gas emissions (2016).

Azimov A.M. PhD student of the educational program "Chemical technology of inorganic substances" performed the doctoral dissertation of the enterprise for production of thermal energy of JSC "3-Energoortalyk" on the subject "Development of technology of membrane extraction of nitrates, chlorides and sulphates of desalination of production waters of heat power networks". By PhD student is developed the technology and membrane device for water desalination.

About 80% of graduates of doctoral studies find a job at the universities and scientific institutions, 20% - work at the enterprises.

According to standard rules PhD students studying at a basis of state financing find a job in the organizations of education and the scientific organizations and are obliged to work 3 years. PhD students, studying at the expense of means of the enterprises find a job in the place of the directing enterprise. PhD students, studying at the expense of own means have the right of independent employment.

The private sector takes part in development of doctor's programs. At SKSU's schools and faculties are organized the branch councils which part are representatives of business and industry sector. The members of councils recommend the directions of preparation, concrete competences, and skills of future graduates. Also they can perform as customers of concrete subjects of researches, with financing of the performed works. At the same time to provide the base for carrying out researches, skilled tests, etc.

2.4 Follow-up of Doctoral Students and graduates

Case of KAZGUU University

KAZGUU University follows up doctoral students and their work on thesis by checking them every semester. Students submit their report on thesis and discuss questions with supervisors and professors. Also Department of postgraduate studies is in constant contact with students, by coordinating all academic and research activities. All master and PhD students have an Adviser, administrative staff who is always in connection with them.

Department of Postgraduate studies provide variety of trainings for students to become competitive specialists after graduation. They are not obligatory and compulsory to get a doctoral degree, but they are advisory and most of the students prefer to choose these certified trainings.

Currently we have 4 certified trainings for PhD students:

- Change management
- Emotional Intellect
- Problem solving
- Effective communications

KAZGUU University follows state standard created by Committee for Control in the Sphere of Education and Science under the Ministry of Education and Science that coordinates procedure for defense and relationship between students and supervisors. Also KAZGUU University signs a contract with PhD students and Supervisors regarding their rights and obligations.

KAZGUU University created special documents for every student, professor and worker to coordinate relationship within the university. Document called "Code of academic honesty" and "Code of ethics" which includes provision on plagiarism. Regarding technical support KAZGUU University is in partnership with the website antiplagiat.ru which helps to discover signs of plagiarism.

In order to prevent drop outs KAZGUU University has summer schools where students can study those disciplines that they couldn't pass in the semester. Along with summer school in order to resolve a dispute we have an Ethics Committee, where students can discuss their problems, questions with professors and administrative staff.

Doctoral students can have state scholarship based on their high results during their entry exams. Number of scholarships can change year by year by the Ministry of Education. In KAZGUU University currently have 10 out of 22 PhD students with State scholarship.

In KAZGUU University there is no theses financed by private, public or state bodies.

KAZGUU University doesn't have official statistics on the percentage of students finding a job immediately after their thesis. However, universities along with the Ministry of Education organize monitoring of employment. Since most of the students are professors of the University, it's expected for them to continue working here after getting doctoral degree.

The university has established an Association of graduates of doctoral studies with meetings organized on a regular basis.

Case of SKSU

In SKSU is organized the service of consultation and support of students on a system basis. Since 2004 the Center of postgraduate is organized which administers students of master and doctor's programs. This center is responsible for the organization of process of training and researches for educational programs of doctoral studies. The organization of all types of control and calculation of the academic rating of doctoral candidates are perfromed by Office of registration.

All PhD students are assigned to the relevant departments. At departments the advisers are appointed for consultation of students concerning registration for elective courses, formations of the individual curriculum, the choice of educational and methodical literature, work in Internet, etc.

Professors, conducting studies for PhD students hold group and individual consultations on a research part of the program and also consultation on all types of practice and training.

In SKSU, the scientific and technical council functions, which considers relevance of scientific research, approves scope of PhD thesis, approves reports of doctoral candidates. In case of need hears reports of PhD students on carrying out research.

PhD students have an open entry to laboratories and library of the university, including to the databases "Kazpatent", "Standarts RK", "Digital library on human rights", "EBSCO", Scopus, Thomson Reuters ISI web of Knowledge, ScienceDirect, SpringerLink.

For example. The university signed contracts for library and information service with the leading Kazakhstan libraries: National library of the Republic of Kazakhstan, National Academic library of the Republic of Kazakhstan, with Association of Higher educational institutions of the Republic of Kazakhstan. The university keeps in touch with South Kazakhstan branch JSC National Center of Scientific and Technical Information concerning providing the university with access to foreign resources of scientific and technical information.

The Rector's meetings with PhD students of the university thanks to which the youth has an opportunity to perform with suggestions for improvement of conditions of teaching and educational process are traditionally held.

In SKSU the Center of Bologna Process and the academic mobility functions. The Center is engaged in the organization of internal and external mobility.

Main objectives of the Center of Bologna Process and Academic mobility:

- Joint educational programs, including within the Network Universities;
- The direction of students on the included training for one academic period in internal and external academic mobility;
 - Organization professional practician and training abroad;
- The organization of passing by PhD students of summer schools at the partner universities and the organization of summer schools in SKSU.

For example. In SKSU is annually carried out the International summer school of Oil Engineering together with the Prague Chemical and Technological University. Within school PhD students master the educational module (5 ECTS), carry out research works and participate in discussions.

Besides obligatory disciplines, for PhD students are organized the specialized actions (seminars, symposiums, trainings, courses):

- On methodology and technology of carrying out research work,
- To techniques of processing of scientific results,
- To scientific ethics,
- Concerning the intellectual property and a transfer of technologies,
- On writing papers in the high-rating journals entering the Scopus/Thomson Reuters database
- On search of scientific data,
- On preparation of applications of research projects,
- To skills of leadership, work in team,
- Language course, etc.

These free actions are organized by various structural divisions of the university and also other organizations.

Educational programs of PhD students in higher education institutions are developed and implemented according to the State Obligatory Standard postgraduate education, approved Government resolution of the Republic of Kazakhstan on August 23, 2012 / No. 1080.

Activity of dissertation councils is regulated by the Standard provision on dissertation council approved by the Order of the Minister of Education and Science of the Republic of Kazakhstan on March 31, 2011/ No. 126 higher education institutions and changed by the order of the Minister of Education and Science of the Republic of Kazakhstan 21.01.2016 /No. 56.

Award of academic degrees is carried out on the basis of Rules of award of the academic degrees approved by the order of the Minister of Education and Science of the Republic of Kazakhstan on March 31, 2011 /No. 127.

At each university the internal documents and provisions regulating research of PhD students over the thesis and a study guide on execution of the thesis are developed. At which in higher education institutions dissertation council's function are developed and regulations on dissertation council of higher education institution are approved.

All PhD students studying according to programs are obliged to carry out Regulations of higher education institution and the Academic code of students. These documents are developed by each higher education institution independently and posted on the website of the university.

The universities adhere to policy of the academic honesty. After reception of the PhD thesis to protection the dissertation council directs the thesis for check to use by PhD students of the borrowed material without reference to the author and a source of loan in the National center of scientific and technical information. In case of establishment of the fact of use by PhD student of the borrowed material without reference to the author and a source of loan, dissertation council makes the negative decision.

All PhD students studying according to programs are obliged to carry out Regulations of higher education institution and the Academic code of students. These documents are developed by each higher education institution independently and posted on the website of the university.

Students in doctoral studies generally it is the people having length of service – scientific, pedagogical, production, the purposes in life which consciously chose scientific activity and accurately representing. Nevertheless, to avoid situations with expel of the doctoral candidate or any conflict situations the Academic Policy of the university in which the rights and obligations of each party, labor discipline, the academic honesty, etc. are reflected is developed.

For monitoring procedure of work of PhD student, during the entire period of training each half a year PhD student provides the report to department and supervisor about the done work. Once a year, PhD student reports at a meeting of scientific and technical or scientific and humanitarian council. The report is submitted in writing form; by results of consideration of the report to PhD student the conclusion is issued. In the presence of remarks on work the department or gives Advice of faculty time to PhD student on completion, appoints consideration of the report to other term. The decision on each work and PhD student is accepted jointly, by open vote. Reports on all types of the practicing, the report on a scientific foreign training are accepted by commission. Thus, the university tries to lower as much as possible a subjective factor at evaluation of PhD student's thesis.

Educational programs for training of PhD students provide a number of actions for further integration of graduates of doctoral studies of PhD into various spheres of action. They include the student teaching, research (for studying according to the program of the Doctor of philosophy (PhD)), a work practice (for students according to the program of profile doctoral studies), foreign research training, and additional theoretical and practical trainings.

Example, teaching practice aimed at formation of complex psychology, pedagogical, information and methodical readiness of PhD students for scientific and pedagogical activity at the university. It includes teaching training courses, the organization of educational activity of students, scientific and methodical work, obtaining skills of practical teaching activities, studying of experience of teaching the leading teachers of the university during visit of studies on scientific discipline, interdisciplinary sciences.

The work practice of PhD students is held for the purpose of fixing of the theoretical knowledge gained in the course of training, and increase in professional level, formation of professional and labor skills on a specialty profile, studying of specifics of work of the enterprises, organizations or institutions in the relevant branch including the organization and management of productions; mastering main skills of modern administrative activity (planning of activity of division, solution of problems, adoption of administrative decisions, control of processes and results of activity).

The individual plan of work of PhD students also provides obligatory passing of a foreign scientific training at which PhD students has an opportunity to gain the research communications and experience necessary for further integration of the graduate on Scientific Wednesday.

Along with this SKSU organizes additional theoretical trainings, such as foreign language courses, seminars and trainings on writing of applications of research projects, papers for publication in high-rating journals that will allow the graduate of PhD students to be integrated into the academic sector.

All PhD students, studying at the expense of the state grant get a scholarship from means of the republican budget. The grant is appointed to PhD students two times a year by results of progress (not below "B—"). Besides, the expenses on a scientific foreign training are refunded.

In SKSU from 77 PhD students, 55 - study on a grant with receiving the state grant, at the expense of own means -22 PhD students. The size of a grant is 220 Euros per month.

The researches, conducted by PhD students are financed in some cases are financed by the enterprises or state grants programs for science. In SKSU the share of dissertation researches, which have external financing reaches 60%.

Example. PhD student Botabayev Nurzhan conducted a research within the state scientific grant "Development of technology of receiving multifunctional adsorbents for increase in qualitative characteristics of oil, oil products and production waters. (2015-

2017)". PhD student Tuleuov A.M. carried out researches within the state scientific grant "Development of technology of receiving composite materials for anticorrosive protection of oil and gas pipelines. (2015-2017)".

All doctoral candidates find a job within 1 month after completion of training.

In SKSU since 2014 the Association of graduates which holds the events directed to increase in professional skills of students and to increase in image of higher education institution in the social environment functions.

CHAPTER 3: INTERNAL QUALITY ASSURANCE MECHANISMS

3.1 IQA mechanisms at institutional and Doctorate level

Case of KAZGUU

The doctoral programs provided by KAZGUU University are designed and implemented in compliance with data and recommendations suggested as results of quality assurance procedures of the university. In general, the university ensures IQA and EQA of all PhD programs. All the quality assurance procedures are in line with the European Quality Assurance Framework and the Standards and Guidelines for Quality Assurance in the European Higher Education Area.

Internal quality assurance

IQA mechanism involves administration staff, program coordinators, faculty, doctoral students, and the registrar and consists of two stages including:

- 1. University Academic Quality Committee. The work of this Committee is arranged by Quality Assurance Manager, who is directly reporting to the Rector of the university. The scope of functions of the Committee is presented below:
- to develop and implement quality assurance systems and procedures across the full range of the Department of Postgraduate Education, the Higher School of Law;
 - to monitor the implementation of quality assurance procedures and processes university-wide.
- to undertake such reviews and audits that are necessary to safeguard the integrity and quality of the university's activities;
- to provide the information and analysis necessary to support decision-making at the university level and within the academic departments;
- to advice the academic units on the quality implications of proposals, policies and strategic plans.
- 2. Academic Quality Committees working on the level of departments (i.e. Higher School of Law and the Department of Postgraduate Education).

On the regular basis once in a semester the University Academic Quality Committee together with the registrar conducts surveys to evaluate teaching and learning process.

Two types of on-line survey via educational portal PLATONUS are arranged for

- PhD students. This survey is aimed to obtain students evaluation of the faculty and is hold after completion of each academic course. The survey strictly follows the principles of confidentiality that are ensured by the registrar. The survey is conducted on the bases of the Questionnaire of the Assessment of Quality of Work of the Teacher that contains questions primarily focused on: quality of classes (lectures, seminars); literacy degree; extensive knowledge and preparedness of faculty; availability of materials and understanding of them by students; creative approach towards the classes; public speaking skills; content of the classes; appearance, manners, inner culture; being late for the classes and failures of classes by the faculty members.
 - Faculty. This survey is targeted to explore faculty's perception of academic programs.

In addition, after each course every faculty member provides self-evaluation report by filling in the Course Management Form. Within this Form it is required to evaluate the outcomes of the course, students' performance, course grades, any difficulties encountered in the teaching process, as well as make suggestions for further improvement of the course.

In accordance with the PhD student's survey (2016) on the quality of the organization of learning process 83.5% of students are satisfied with the quality of provided learning, whereas 16.5% expressed dissatisfaction.

IQA mechanism involves graduates/alumni and employers as actors participating in enhancement process of academic quality.

IQA procedures include the Alumni Survey and Employers Survey that are conducted on the continuous basis vie the Internet. The links to the surveys can be found on the university website.

In addition, once a year the Department of Postgraduate Education arranges the Alumni Club meetings the agenda of which include the issues related to the quality of academic programs (content, structure, methodology, etc.).

The Alumni Club agenda is aimed to:

- contribute to competitiveness of academic programs;
- strengthen and develop Alumni Relations;
- support the Alumni in their further professional development;
- contribute to the strategic decision making;
- support students in Internship and job hunting process;
- contribute to development of the Groups Department/Schools Endowment Fund.

Case of SKSU

The quality assurance of programs and qualifications at the university includes:

- Development and the publication of the planned results of training;
- Constant control over development of the curriculum, drawing up and contents of educational programs;
- Requirements imposed to various forms and types of training (day, correspondence, distance learning);
- Available resources of training;
- Educational and methodical complexes of specialties and disciplines;
- The approved educational programs;
- Educational programs agreed with employers;
- Monitoring of progress and achievements of students;
- Periodic assessment of programs at department;
- Accreditation of educational programs;
- Continuous interaction with employers, representatives of labor market and other organizations;
- Participation of students in procedures of a quality assurance.

The efficiency of implementation of educational programs at the university is estimated by means of external and internal control.

Internal control is carried out by the organizational and methodical commission of quality (OMCO).

OMCQ estimates the educational program (EP) for the certain scheme of the analysis including 4 main directions: 1) structure of EP; 2) maintenance of EP; 3) organization of educational activity; 4) quality control of EP.

Carrying out this analysis allows entering the correcting actions directed to improvement of educational programs.

External control of efficiency of realization of educational services is exercised in the course of work of the state certifying commission (SCC), at accreditation of the educational program.

Administrative regulation of internal and external cooperation of HEI

Control of study of PhD students at the university is exercised of department on the academic questions (DAQ), Office of registration (OR), Strategic development department and quality managements (SDD&QM), Institute of postgraduate training (IPT) and departments.

Department on the academic questions is division of higher education institution which activity is aimed at educational and methodical, information providing and control of educational process.

Office of registration is the service which is engaged in registration of all history of educational achievements of the student and providing the organization of all types of control of knowledge and calculation of its academic rating.

The purpose of activity of Strategic development department and quality management is the internal assessment of quality of education including a quality management system, monitoring of processes, various procedures of a self-assessment of all kinds of activity of the university and also assistance to employment of graduates.

Activity of institute of postgraduate training is directed to the organization of educational process of PhD students for credit technology of training, delivery, registration of examination sheets, control of formation and implementation of individual curricula of undergraduates, control of drawing up and implementation of the schedule of independent work and methodological support of educational process in a magistracy includes documents acceptance and the organization of admission examinations in a magistracy, formation of the academic groups, drawing up the schedule of studies, reception and the analysis of semi-annual and annual reports of undergraduates, maintaining and storage of the academic records, the organization of the current, intermediate and total control of knowledge of undergraduates.

For ensuring external cooperation at the university are created the Center of Bologna Process and Academic Mobility (CBP&AcM) and Center of International cooperation (CIC).

Main objectives of the CBP&AcM:

- Assistance of internationalization of domestic education in educational and research activity;
- Realization of the academic mobility of students;
- Carrying out the analysis of the advanced innovations in the international educational space and development of offers for the management of the university;
- Work with national and international rating agencies on representation of materials for participation in the procedure of ranging of higher educational institutions.

The main functions of Center of International cooperation (CIC):

- Work with foreign partners, signing of the contracts, projects coordination and approval of programs;
- Information support of international action of the university and providing information on questions of international backgrounds;
- Coordination and approval of programs, monitoring of international cooperation;
- Cooperation and organization of joint projects for innovative technologies of educational and scientific and practical character, rendering consultations and information and education services;
- Coordination of work on exchange of training of experts, professors, students and young scientists according to programs of exchange;
- Cooperation with JSC Center of the International Programs on training of applicants for participation in a competition of the international grant of the President of Kazakhstan of "Bolashak";
- Work on the organization of visits of foreign representatives for lecturing, carrying out scientific consultations, seminars, master classes, fact-finding, etc.;
- Participation in the international educational programs provided by foreign partners, embassies and representations.

Main objectives of department:

- Development of educational programs;
- Carrying out all types of studies (lectures, practical, seminar and laboratory etc.);
- Organization and control of independent work of students;
- Implementation of the current control of progress and intermediate certification of knowledge studying with use of rating system of assessment;

- Organization of quality control of training, carrying out and discussion of open studies, results of mutually visits of studies;
- Implementation of a complex methodological support uniform educational documentation of disciplines;
- Preparation of education guidance, development of the educational and methodical materials, providing use of the most expedient forms and methods of teaching, a rational combination of methodical receptions, effective use of the modern educational equipment;
- Professional development of research and educational personnel.

According to requirements of IS of ISO 9001:2008 on the basis of normative documents of Ministry of Education and Science of the Republic of Kazakhstan, at the university procedures for management of educational, scientific and extracurricular activities are developed. The process of training of PhD students, including entering of PhD students, their training, and control of progress, practical training and employment is regulated by the following procedures developed on a quality management system:

Table 4. Quality Management System Procedures

Document Identification Code	Title
SMQ SKSU PR 7.02-2015	Management of educational and organizational processes
SMQ SKSU PR 7.03-2015	Management of educational and methodical processes
SMQ SKSU PR 7.04-2015	Studies. General requirements to the organization, contents and training
SMQ SKSU PR 7.08-2012	Management of process of scientific activity of students;
SMQ SKSU PR 7.11-2015	Organization of the academic mobility of students;
SMQ SKSU PR 7.12-2013	Management of process of distribution of graduates
SMQ SKSU PR 7.13-2015	Management of process of selection of entrants. Identification and traceability
SMQ SKSU PR 7.27-2013	Organization and carrying out professional practice of undergraduates and postgraduates
SMQ SKSU PR 7.28-2013	Organization and carrying out scientific and research work of undergraduates and postgraduates
SMQ SKSU PR 7.29-2013	Organization of a training of undergraduates and postgraduates
SMQ SKSU PR 8.01-2012	Internal audit
SMQ SKSU PR 8.04-2015	Intra high school control of quality of education
SMQ SKSU PR 8.06-2015	Management of process of carrying out the current control of progress, intermediate and final assessment
SMQ SKSU PR 8.07-2012	Assessment of satisfaction of consumers

CHAPTER 4: EXTERNAL QUALITY ASSURANCE MECHANISMS AND NATIONAL POLICIES

4.1 National strategy in terms of Doctorate level and QA of Doctorate level: state of the art

External quality assurance of PhD programmes is carried out by national and foreign accreditation agencies that are part of the National Register of Accreditation Bodies of the Ministry of Education and Science of the Republic of Kazakhstan. The higher educational institution independently chooses and applies for accreditation to the relevant accreditation body. The cost of the procedure for conducting accreditation is payed by the university.

The accreditation procedure of PhD programmes is based on standards and criteria for specialized accreditation of higher and postgraduate programmes. Features of PhD, as a rule, do not stand out in the standards.

According to the Law of the Republic of Kazakhstan "On Education", specialized accreditation is the evaluation of the quality of educational programmes implemented by the education organization (art. 1, para 42). Thus, in contrast to institutional accreditation aimed at a comprehensive evaluation of the entire higher education institution as a whole, specialized accreditation is aimed at a comprehensive evaluation of a specific educational programme.

The methodology of higher and postgraduate education programme accreditation is unified and follows the model common in the EHEA and international practice in the field of quality assurance:

- Self-evaluation of the educational programme and writing a report;
- External audit to confirm the facts;
- Report of the external expert group;
- Decision on accreditation by an independent Accreditation Council;
- Post-accreditation monitoring of accredited programmes.

The process of specialized accreditation (a full cycle of procedures) can take 1-1.5 year.

The expert group consists of experts from the academic environment, international experts, experts on behalf of students and the labor market. Academic experts evaluating PhD programmes should have a PhD or Doctor of Science degree and extensive experience in teaching in higher education institutions and in the development of PhD programmes.

Reports on external audit, indicating the composition of the expert group, as well as decisions on accreditation are published on the agency's website, and also provide information on accredited educational programmes in the Ministry of Education and Science of the Republic of Kazakhstan.

If the decision is positive, the programme can be accredited for a full term (5 years) or an incomplete term (1 year, 3 years.) If the decision is negative, the programme is considered to be non-accredited.

In the period from 2009 to October 2017, 263 PhD programmes were accredited, most of which were accredited by national quality assurance agencies: IQAA - 122 programmes¹¹, IAAR - 83 programmes¹². Thus, within the period indicated 58 PhD programmes were accredited by

¹²IAAR. List of Accredited Programs. Higher Education Institutions. Source: http://www.iaar.kz/en/accreditation/list-of-accredited-programs/higher-educational-institutions

¹¹ IQAA. Decisions on Accreditation. Specialized Accreditation. Source: http://iqaa.kz/en/decisions-on-accreditation/hei-s/specialized-programme-accreditation

foreign agencies: ACQUIN (Germany) - 26^{13} , AQ (Austria) - 16^{14} , FIBAA (Germany) - 15^{15} , ACBSP (USA) – 1^{16} (see Annex 1, Diagram 2).

4.2 Future incentives for Cycle 3 at national level

To meet the needs of universities and scientific organizations in academic personnel from 2015, citizens enrolled for doctoral studies under the PhD programme state grant are required to work at universities or scientific organizations for at least three years after completing the training. Since 2016, new requirements have been introduced for PhD applicants: Master degree or completion of residency training for medical specialties and at least 3 years of work experience. Also, starting from 2016 in order to increase access to postgraduate education, students for doctoral studies can be taught on a fee basis.

According to the State Programme for the Development of Education (2016-2019), it is planned to increase the number of state PhD grants, including Nazarbayev University to provide the higher education sector with academic and pedagogical personnel.

In the short run, the mechanism of admission and training of personnel in bachelor's, master's and doctoral studies will be improved by means of market regulation, in particular, the volume of the state educational order at universities regardless of the form of ownership. Since early 2017, the issue of transition to credit-per capita financing in higher education has been under consideration, with proposals for financing the state educational order taking into account the involvement of employers.

Improving the quality of doctoral education is one of the priorities of the state policy of Kazakhstan in the field of education. In the State Programme for the Development of Education and Science of the Republic of Kazakhstan for 2016-2019, approved by the Decree of the President of the Republic of Kazakhstan dated March 1, 2016, one of the main tasks of the education system is to improve the quality of study programmes of Cycle 3 and to strengthen the requirements for the scientific component of PhD training.

Paying special attention to the training of researchers, the Ministry of Education and Science of the Republic of Kazakhstan has consistently increased the number of budget places for PhD studies from 500 in 2014 to 1500 in 2017.

An important direction in the development of doctoral studies is the increase in the number of specialties that, on the one hand, will cover all research areas, and on the other, correspond to the current level of science development in the country and abroad. In addition, the training of PhD students from 2017 will be carried out in partnership with employers.

Every year the government allocates about 37,000 state grants (scholarships) for studies at universities, including 2% for PhD studies. Until 2016, the training of PhD students was carried out only by means of the state budget, but since 2016 a paid basis for training in PhD studies was also introduced (Decree of the Government of the Republic of Kazakhstan № 404 dated 14 July 2016). As it is seen from the Table 4 (see Annex 1), there was a significant growth in the number of doctorate students receiving full state funding for their education.

PhD students who receive state grants are also awarded with a state scholarship for the entire period of study and are paid monthly. At present moment, the amount of the monthly state scholarship of PhD students constitutes 81998 tenge in accordance with the Decree of the Government of the Republic of Kazakhstan dated 7 February 2008 № 116 "On Approval of the Rules of Appointment, Payment and Amount of State Scholarships for Students in Educational Organizations".

 $^{{}^{13}\,}ACQUIN.\,International\,\,Accreditation.\,\,Source:\,\,\underline{https://www.acquin.org/de/akkreditierte-studiengaenge/international/?titel_studiengaenge\&land=Kasachstan\&standort=\&hochschule=\&fachausschuesse=\#result}$

¹⁴AQ Austria. Decisions on higher education institutions outside Austria. Source: https://www.aq.ac.at/en/decisions-on-accreditation-and-certification/decisions-higher-education-institutions-outside-Austria.php

¹⁵ FIBAA. Accredited Programmes. Kazakhstan. Source: http://www.fibaa.org/nc/en/procedures-at-programme-level/prog-according-to-fibaa-quality-standards/accredited-programmes.html?menu=weitere

¹⁶ ACBSP. Accreditation. Source: https://www.acbsp.org/?page=accreditation

Table 5. Amount of a state scholarship for PhD students in 2012-2016, thousand tenge¹⁷

Year	2012	2013	2014	2015	2016
Amount of the	59635	59635	65599	65599	81998
scholarship					

Due to the fact that the percentage of the teaching staff holding research degrees is quite low (only 2% of the total number of the teaching staff hold a PhD degree), academic staff are offered various types of financial incentives for admission to PhD studies. The teaching staff from state educational organizations have an opportunity to receive an additional raise to salaries if they have a corresponding diploma: for a PhD degree or a Specialized Doctorate degree in the amount of one monthly minimum salary¹⁸; for a degree of Candidate of Sciences in the amount of one monthly minimum salary and a Doctor of Science in the amount of two monthly minimum salaries. ¹⁹ Salaries in private universities are negotiated individually in the employment contract. Bonuses are determined by HEIs based on a rating system, which takes into account also research work (publications, participation in conferences, seminars, supervision of students' research activities, etc.).

In addition, the academic staff of the Republic of Kazakhstan can undergo further professional training, scientific training under Bolashak programme.

The Ministry of Education and Science regularly announces grant and programme-oriented funding of research projects which is open to all interested researchers. The Ministries of Agriculture, of Investment and Development announce annual competitions for young researchers and innovators where a generous grant is provided to support research activities. Universities also provide incentives to enhance professional development of staff in the form of paid and unpaid leaves enabling them to participate in research projects, prepare PhD thesis, study abroad, etc.

As of 2016/17 academic year, the total number of PhD students constituted 2 710 individuals, including 1 673 female representatives (61,7%). Therefore, the number of females slightly exceeds the number of males doing PhD. In the context of specialties, the greatest difference in the number of male and female students enrolled in PhD programmes is observed in specialities of education, humanities, and health and social care. The lowest disproportion is noted in programmes for technical and natural sciences (see Annex 1, Table 5).

In Kazakhstan, there is no particular mechanism for balancing gender equality during the enrollment of students to PhD programmes. However, the government recognizes the importance of attracting more male students to PhD programmes, especially to specialties of education and health.

Doctor of Philosophy is one of the representatives of the scientific and pedagogical staff of the Higher School of the Republic of Kazakhstan. This academic degree gives great prospects in self-realization, the opportunity to engage in scientific and pedagogical activities at universities, the achievement of goals in science, the possibility of concluding partnerships with foreign colleagues, the exchange of experience with scientists from leading international universities, foreign internships, lecturing and conducting researches in leading scientific centers, perfection of foreign language knowledge, getting double diplomas, participation in international projects, etc.

Foreign companies, as well as companies with foreign participation are looking for graduates of MBA and DBA, they are in great demand, but within economic specialties, the number of grants is reduced from year to year. So, in 2011, 46 grants were allocated to economic specialties in Kazakhstan, in 2012 - 40, in 2013 - 26 places, which does not meet the needs in scientific and

¹⁷ The National Report on the State and Development of the Education System of the Republic of Kazakhstan, Astana, 2014; The Resolution of the Government of the Republic of Kazakhstan dated 7 February 2008 No.116 "On the approval of the rules of appointment, paying and size of state scholarship for students of educational organizations".

¹⁸ The size of the minimum wage of the Republic of Kazakhstan for 2017 – 24459 tenge http://egov.kz/cms/ru/articles/article_mci_2012

¹⁹ Law on Education of the Republic of Kazakhstan, p. 56, para 6.

pedagogical personnel. All this led to a sharp reduction in the number of people who received a PhD in Economics.

4.3 External quality assurance policy

In Kazakhstan, as in many countries around the world, the quality assurance system includes two elements: external quality assurance and internal quality assurance. External quality assurance is carried out through accreditation of education organization and educational programmes. The national model of accreditation, which is based on the principles of independence, voluntariness, has been formed. Types of accreditation: institutional accreditation - accreditation of educational organizations; specialized accreditation - accreditation of educational programmes.

Accreditation is carried out by accreditation agencies, which by status are non-profit non-governmental organizations. To recognize accreditation at the governmental level, accreditation agencies should be included in the Register of the Authorized Body in the field of education.

The Ministry of Education and Science of the Republic of Kazakhstan develops requirements for accreditation bodies included in the Register. One of the requirements for their inclusion in the Register is full membership in international European networks to ensure the quality of education. Accreditation agencies independently develop criteria and standards for accreditation taking into account international requirements. Standards for institutional and specialized accreditation must comply with the Standards and Guidelines for the Quality Assurance of Higher Education in the European Area, developed by the European Network for Quality Assurance (ENQA) in higher education (Standards and Guidelines for Quality Assurance in EHEA).

From 2012 - 2016, the National Register included two national and eight foreign QA agencies. The agencies-members of the National Register have a certificate signed by the Minister of Education and Science of RK for a five-year period. Every five years agencies are subject to recertification. The European agencies listed in EQAR are recognized by the MES RK, however, they must register in Kazakhstan.

In the beginning of 2017, the composition of the National Register was significantly changed. At the moment, it includes 4 national and 3 foreigh accreditation agencies: ²⁰

- Independent Kazakh Agency for Quality Assurance in Education (IQAA, Kazakhstan);
- Independent Agency for Accreditation and Rating (IAAR, Kazakhstan)
- Kazakhstan Association of Engineering Education (KAZSEE);
- Independent Agency for Accreditation and Expertise of Education Quality (ARQA, Kazakhstan);
- Foundation for International Business Administration Accreditation (FIBAA, Germany);
- Accreditation Agency for Degree Programs in Engineering, Informatics/Computer Science, the Natural Sciences (ASIIN, Germany);
- Music Quality Enhancement (MusiQuE, Belgium).

The rules for internal quality assurance are developed independently by the universities.

Quality assurance is a planned and systematic activity of a university or other body that is implemented to ensure that educational programmes and processes complied with the established requirements.

The central executive body in the field of education - the Ministry of Education and Science is the body that manages the functions of state control over the quality of education. The control is carried out according to the following quality assessment criteria: quality of resources; quality of educational programmes; quality of the process; quality of content; the quality of human resources; the quality of the results; improvement of quality/quality of changes.

Tools for quality assessment are licensing, post-licensing control, external evaluation of educational achievements. Their use is based on regulatory documents governing the process of external evaluation. The bodies responsible for the internal quality assurance system are the institutions of higher education themselves.

²⁰ National register of QA agencies. Committee for Control in Education. http://control.edu.gov.kz/ru/akkreditaciya

In 2013, a national model of university accreditation was formed. National registries of accreditation agencies, accredited educational organizations and educational programmes have been formed. The accreditation procedure is carried out in accordance with the standards of institutional and specialized accreditation, harmonized with the European quality standards of education (ESG).

In 2016, by the order of the Minister of the Ministry of Education, the rules for the recognition of accreditation bodies were changed (1 November, 2016; № 629). According to the new rules ²¹ for the recognition of accreditation bodies, accreditation body should:

- 1) have the status of a legal entity in the form of a non-profit organization;
- 2) be a full member of the international European network for the quality of education;
- 3) have the resources, required for fulfillment of obligations on accreditation of educational organizations, educational programs
- 4) have at least ten experts, having PhD or Doctor of Science, or a specialized PhD degree, involved in the accreditation, with at least five years experience in the field of educational programs accreditation:
- 5) have standards for accreditation, which set the requirements to the procedure of accreditation.

Monitoring the quality of the education system through the external evaluation of the students' learning achievements makes it possible to determine:

- educational achievements of each student and the degree of development of his personal qualities;
- educational achievements of the class, group, faculty, specialty;
- educational achievements of the organization of education, the region and the educational system as a whole;
- activity of the education organization in general.

Accreditation is one of the forms of state control, carried out on a voluntary basis according to the applications of universities. The mechanism for conducting accreditation has already been developed.

What has been achieved in the National System in terms of External Quality Assurance:

- procedures for internal and external evaluation of the quality of education have been introduced;
- standardized assessment tools and tools that determine the level of educational achievements of students have been improved (new ESG standards);
- organizational structures that assess the quality of education have been created. For external
 evaluation of educational organizations, licensing, accreditation, ranking, centralized testing
 and direct monitoring studies have been envisaged.

Internal assessment in the form of self-assessment, ongoing monitoring of academic performance, evaluation of educational achievements of students, is carried out in education organizations.

As is known, accreditation has two main components: compliance with quality assurance standards and improving the quality of the institution's work.

According to respondents' answers to the question²²: What does accreditation mean for educational organizations? - the answers are as follows:

- 91% of the respondents state that it helps in systematization of the work of the university/program;
- 75% think that necessary transparency of the institution's activities is achieved through a collective discussion of the state of affairs;
- 73% indicate at a significant improvement of the material and technical base of the university;

²¹ Order by the Minister of MoES "On approval of the Rules for the recognition of accreditation bodies, including foreign ones, and the formation of a register of recognized accreditation bodies" dated 19 November 2016. Source: http://adilet.zan.kz/rus/docs/V1600014438

²² Article in a newspaper. Dorogu osilit idushy. Source: http://www.kazpravda.kz/fresh/view/dorogu-osilit-idushchii3/

- 92 % state that teaching and methodological encouragement take place when the institution undergoes accreditation;
- 82% notice that improvement is obvious in the sphere of human resources policy;
- 100 % point at the strengthening of links between graduates and employers;
- 70% put stress on the formation and development of the corporate culture, and teambuilding activities.

The respondents highly appreciate the following aspects of accreditation:

- universities are accredited by trained, certified experts, including international 92%;
- the accreditation is held with involvement of employers, students 93%;
- clear external audit program and time 100%;
- availability of standards and guidelines for each procedure 100%;
- well-thought-out system of recommendations -94%;
- feedback from the experts 81%

SWOT analysis based on ESG Part 2

Strengths

- 1. IQAA regulatory documents that set standards explicitly reflect ESG as the basis. Standards are built on ESG. The standards contain normative requirements, criteria for assessing the activity of the university / educational programme and are the main document for the university when preparing a self-assessment report, for experts dealing with external audit.
- 2. To conduct the accreditation, the Agency has prepared guidelines for writing a self-assessment report, specialized accreditation report templates, a guide for experts involved in external auditing, and guidance for students.
- 3. IQAA has developed its own procedures and all regulatory documentation. The Agency's standards are consistent with the stakeholders.
- 4. The Agency has developed procedures for conducting a training workshop for the preparation of a self-assessment report, expert assessment of the report, selecting experts, conducting external audit, making decisions, complaints and appeals procedures, feedback and conducting post-accreditation monitoring. Provisions and guidelines have been prepared for all stages.
- 5. A thorough selection of experts with the necessary competencies and knowledge to conduct an objective and qualitative assessment. Guidelines on external audit, for experts on grouping of comments, guidance for students have been prepared. Organization and holding of training seminars, briefings to experts and videoconferences for familiarization with the accreditation procedure, methodology for conducting external evaluation (audit), preparation of the report.
- 6. Mandatory inclusion of an international expert, representatives of students and employers as a member of an expert group. Systematic assessment of the external evaluation experts performance (audit) by the agency and applying its results to improve their performance.
- 7. To make an objective decision, the Agency developed a provision on the decision-making of the Accreditation Council for Institutional Accreditation of Universities/Specialized accreditation of educational programmes.
- 8. The agency places information on accredited HEIs/educational programmes and full expert reports on external evaluation (audit) in an understandable and accessible form for the academic environment, employers, students, parents and other stakeholders on the website
- 9. IQAA effectively applies procedures that ensure transparency, professional and effective resolution of appeals and complaints, and includes representatives of external stakeholders in the procedures.

Weaknesses

1. Less attention is given to measuring the effectiveness of the internal quality assurance system in the methodology for accreditation. (For example, SCL is not sufficiently considered in knowledge assessment practices: methods of self-assessment, peer assessment, formative evaluation).

Opportunities

- 1. Support of universities by means of conferences, seminars, involving foreign experts
- **2.** In cooperation with the Ministry of Education and Science of the Republic of Kazakhstan, universities and employers can be included in the process of development and revision of the sectoral framework of qualifications, so that universities may develop educational programmes based on professional standards.
- **3.** The IQAA should consider providing additional training and/or supplementary materials to the international experts on the national higher education system and the context of quality assurance in Kazakhstan.
- **4.** To expand and deepen work on the development of a quality culture in education organizations
- **5.** Expand research on thematic analysis and other types of research.