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CORPORATE UNIVERSITIES IN KAZAKHSTAN'S MINING & METALS INDUSTRY

Обзор деятельности за 2024

Август, 2025 год

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In the Year of Vocational Professions, we are proud to present the first industry review dedicated to training and personnel development in Kazakhstan's Mining and Metallurgical Complex (MMC), a sector in which we operate and of which we are truly proud.

The project was launched in 2024 in partnership with six MMC companies, each of which is unique in terms of staff numbers, internal processes, and approaches to employee development.

What do we have in common? A common desire to provide employees with knowledge and tools that make work more efficient, business more successful, and people more engaged and satisfied with their work.

Despite the differences and competition in certain areas, we recognize the value of partnership. We want to learn from each other, share best practices, improve safety and efficiency, and build productive collaborations.

To make this possible, it is important to understand the strengths of each company, to be aware of what we can share and what we need. Only a fair picture allows you to adequately assess your own successes and move forward.

We would like to express our sincere gratitude to the corporate universities of **KAZAKHMYS**, **QARMET, KAZZINC, KAZATOMPROM, and ALTYNALMAS** for their active participation and contribution to the study.

Special thanks to the management of ERG Kazakhstan: Serik Shakhazhanov, General Director, and Anastasia Kruch, Deputy General Director for Personnel and Culture, for their support of the initiative.

We would like to express our special gratitude to Professor Valery Katkalo, Director of the HSE Graduate School of Business, and Martin Moehrle, Director for Corporate Services at EFMD and Head of the CLIP Accreditation Program, for their inspiration, expert support, and personal involvement.

In the future, we plan to expand the scope of the study to deepen our understanding of the state and prospects of corporate training in Kazakhstan. This will create a platform for the exchange of experience and best practices, which, in turn, will improve the quality of personnel training in all sectors of the country's economy.

Regards,

ERG Kazakhstan Corporate University Team – Valentina Satarova, Olga Iksanova, Aizhan Bazarbayeva, Aida Bapakhova, Zumrada Koizhanova

THIS REVIEW DOES NOT EVALUATE THE EFFECTIVENESS OF LEARNING SYSTEMS, IT SERVES AS A GUIDELINE FOR INTROSPECTION, EXCHANGE OF PRACTICES AND FORMATION OF DEVELOPMENT VECTORS OF CORPORATE UNIVERSITIES OF THE KAZAKHSTAN'S MMC.

THE CONCLUSIONS AND OPINIONS PRESENTED IN THE REVIEW REFLECT THE EXPERT POINT OF VIEW OF THE AUTHORS OF THE STUDY.

BENCHMARKS ARE DATA THAT HAS BEEN SUMMARIZED FROM VARIOUS SOURCES (see p.56).

INTRODUCTION 1/2

There is a significant variability in approaches to employee training and development in the MMC of Kazakhstan. An analysis of six corporate universities that participated in the study revealed significant differences due to:

- the scale of each company's business,
- the peculiarities of corporate culture,
- the level of management involvement,
- the amount of resources allocated for training.

These factors create a heterogeneous environment in which the effectiveness of training and development programs varies significantly.

Some corporate universities prioritize cooperation with external training organizations. This model allows them to quickly scale up training, attract qualified experts in narrow fields, reduce the burden on internal resources, and use the latest practices. The main internal competencies are focused on contractor management, drafting technical specifications, service quality assessment, and controlling.

Other corporate universities emphasize the development of internal training systems. Here, business-adapted programs are created, internal trainers are prepared, and production training grounds and simulators are developed. This approach requires significant investments at the start, but it allows you to achieve greater accuracy of content, continuous professional development and strengthen internal relationships. This helps not only to improve the quality of education, but also to create a system focused on long-term results and continuous improvement of business processes.

The review presents trends in the mining and metallurgical industry that determine the personnel development system, as well as areas and opportunities for improvement.

The data is presented in summary and individual form for each corporate university, with information **approved for publication by the authorized bodies of each company, taking into account the sensitivity of the information to be disclosed in the public domain.**

INTRODUCTION 2/2

When preparing the review, traditional research methods of corporate learning systems were used, which are focused not only on describing the current state, but also on identifying key factors that **ensure the contribution of corporate universities to the development of the company's business.**

Three conditions under which a corporate university can be a driver of a company's business development are the following:

1. **STRATEGIC ROLE OF THE CORPORATE UNIVERSITY AS A DRIVER OF BUSINESS DEVELOPMENT.** A corporate university brings maximum value when it is integrated into the strategic agenda of a company, and it participates in the formation of an HR strategy, the development of a leadership reserve, the support of transformations and the implementation of changes. For business leaders, the corporate university is a strategic function closely linked to the company's top management and governed by a collective governing body.
2. **LEADERS TEACH LEADERS IS A DRIVER OF CULTURE OF DEVELOPMENT AND ENGAGEMENT.** Involving the best managers and key experts in training and knowledge transfer strengthens vertical connections, fosters a culture of mentoring, and gives training a practical focus by creating a system for managing the company's internal knowledge. This approach increases the credibility of educational programs, promotes the consolidation of key corporate values and improves management continuity.
3. **SUSTAINABLE AND SUFFICIENT RESOURCE PROVISION IS THE BASIS FOR QUALITY AND CONSISTENCY OF DEVELOPMENT.** A predictable budget is not a formality, but a necessary condition for strategic planning. The corporate university can create comprehensive long-term programs, implement modern tools, and build long-term staff development with stable resources only. Companies that systematically invest in training demonstrate increased operational efficiency, reduced production errors, and better employee engagement.

A corporate university becomes a real competitive advantage, if it is perceived as a strategic resource with a clearly defined role, sustainable funding and active involvement of leadership. In this configuration, a corporate university is capable not only of training, but also of shaping culture of development, supporting operational efficiency, and preparing the company for future challenges.

GLOSSARY 1/3

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TERMS AND ABBREVIATIONS:

1. **Training administration** means the support for the training process, including (but not limited to) participant registration and consultation, application processing, schedule management, and documentation maintenance (acts, reports, certificates, etc.).
2. **Employee training budget** means the amount of money allocated for arranging and conducting training activities for employees (training sessions, workshops, programs). It does not include social and government educational initiatives.
3. **Internal Trainer** means a company employee who conducts training for other employees of the same company.
4. **Internal Expert** means a company employee involved in the development and implementation of learning solutions.
5. **Research activities of MMC's CU** means the targeted analysis of learning and production practices to improve training and personnel development programs, taking into account the tasks of the industry.
6. **Corporate programs for production and support functions** mean internal training and qualification programs based on professional standards and production specifics.
7. **Corporate University (CU)** means a structural unit of the company responsible for the processes of learning and development of the company's employees.
8. **Coach** means a specialist who helps a person or a team unlock their potential through a specially structured dialogue without direct advice, based on questions and techniques.
9. **Mentor** means an experienced person who helps a less experienced person (mentee) develop by sharing experience and support in an informal and trusting environment.
10. **Supervisor** means an experienced employee who helps a newcomer or less experienced colleague adapt, master tasks, and integrate into the team by transferring practical knowledge and skills.
11. **Learning Solution (LS)** means educational products and services aimed at developing the knowledge, skills and competencies of employees (courses, programs, trainings, etc.).
12. **Learning Management System (LMS)** means a web service and/or an application designed to organize and conduct educational courses, training sessions, workshops, and other forms of online learning.
13. **Training** means specially organized training events tailored to the needs of the company, carried out at all levels and in all divisions of the company, aimed at mastering a specific area of knowledge and skills by employees through participation in educational programs as part of training, retraining and advanced training of employees with the issuance of a supporting document (qualification certificate, certificate of completion, diploma, certificate, etc.).

GLOSSARY 2/3

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TERMS AND ABBREVIATIONS:

14. **The total area of the educational infrastructure** means the size of the physical space intended for employee training, including all premises and facilities involved in the educational process (training rooms, practical training areas, etc.).
15. **Mandatory safety training** means a process established by the legislation of the Republic of Kazakhstan and corporate standards of companies for the mandatory training, retraining, and testing of employees, managers, and other categories of personnel on occupational health and safety, industrial, fire, and other safety issues. This type of training is conducted before and during employment in accordance with approved programs and deadlines, as well as internal regulations of the company, in order to prevent occupational injuries, accidents and other incidents.
16. **Online mode** means a form of training using information and digital technologies, carried out remotely, without face-to-face interaction with the instructor.
17. **Training organization** means a full cycle of training process management, including interaction with the customer, needs analysis, development of training programs and teaching materials, planning and implementation of training, support for participants, summarizing results, and evaluating training effectiveness.
18. **Full-time mode** means a form of training with the physical presence of students and trainers in classrooms, involving direct interaction and participation in the learning process away from the main professional activity.
19. **Vocational training** means a system of educational activities aimed at forming, updating, and developing the professional knowledge, skills, and abilities of employees in the vocational professions. It includes initial vocational training, retraining, advanced training, as well as specialized courses on specific production tasks or employer requirements.
20. **Blended mode** means a training form that combines elements of online and full-time training.
21. **Speaker** means a participant in conferences, workshops, training sessions, forums, educational and other corporate events who gives a speech, presentation, lecture, or talk.
22. **LS Digitization Studio/Center** means a structural unit that converts educational and methodological materials into digital form for the purpose of developing and creating online courses.
23. **Classrooms and training rooms** mean specially equipped rooms designed for conducting educational classes, trainings, lectures and other educational events.

GLOSSARY 3/3

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TERMS AND ABBREVIATIONS:

24. **Educational infrastructure (EI)** means educational premises (classrooms, lecture halls, conference rooms, etc.), specially equipped areas for practical training (training grounds, etc.), equipment (computers, tablets, projectors, interactive whiteboards, VR, AR, etc.), online learning platforms (e.g., Moodle, Blackboard, etc.).
25. **Training centers/locations** mean physical spaces designed to hold training events for company employees, which can be either within the company itself or at third-party institutions (corporate training centers, rented external training centers, mobile training centers, centers in educational partnerships with educational institutions, and others).
26. **Facilitator** means a person who helps a group interact effectively, achieve goals, and make decisions by guiding the communication and discussion process. He/she does not provide direct solutions, but creates conditions for productive discussion and maintains an atmosphere of trust and openness.
27. **Number of employees** means a total number of employees of a company, including the number of head offices (headquarters) and company assets (subsidiaries, branches, etc.), which may be indicated in this review in a rounded/generalized form.
28. **Learning and Development (L&D)** means personnel training and development.

METRICS AND CALCULATIONS:

1. **Training budget per employee (KZT)** means the total training budget divided by the number of employees.
2. **Willingness to use the acquired knowledge** means a parameter for evaluating training program participants, calculated as the sum of the ratings of participants willing to apply their knowledge divided by the number of total participants in the group.
3. **Share of training in total personnel costs (%)** means (training costs / total personnel costs) × 100%.
4. **Training success rate (%)** means (a number of employees who passed the exam from the first attempt / total number of trainees) × 100%.
5. **Number of traineed employees (pers./times)** means the total number of trainings conducted (times) divided by the number of employees of the company.
6. **Average annual renewal of the LS portfolio (%)** means (a number of updated educational programs / total number of educational programs) × 100%.
7. **Average score obtained after training for a period** means the sum of the scores of all trainees at the end of the training period divided by the number of trainees during that period.
8. **Overall satisfaction with a training (NPS, %)** means the difference between the percentage of promoters and the percentage of critics based on the assessment of participants of the training event.

1 TRENDS IN LEARNING THAT DEFINE KAZAKHSTAN'S MMC

KAZAKHSTAN'S MINING & METALS INDUSTRY 1/2

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KAZAKHSTAN'S MINING & METALS INDUSTRY is one of the key industries in the country's economy, which ensures significant portion of export earnings and employment.

every **3d** out of 10 employees

of the industrial sector of Kazakhstan works at mining & metals enterprises

487

Mining & metals enterprises in Kazakhstan

Table 1 Number of MMC enterprises

178	services in the mining industry
107	metallurgical production
69	production of finished metal products
59	metal ore mining
55	mining operations
19	coal mining

Table 2 MMC share (%) in Kazakhstan

39.3%	manufacturing industry
30.9%	general structure of industrial production
17.6%	export
11.9%	GDP

Kazakhstan's mining & metals industry occupies a significant place in the world due to its rich natural resources, strategic geographical location and growing role in global supply chains of raw materials.

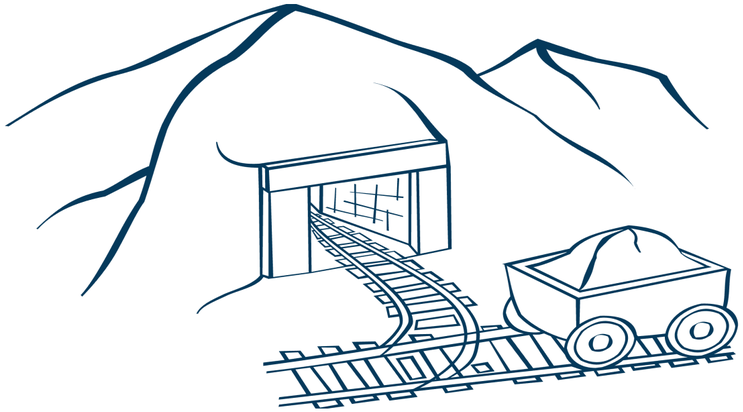
Table 3 World ranking in exports

Key positions of Kazakhstan's MMC	World ranking	Volume (thousand tons)	Specific weight in the export of the RoK
2844 - Radioactive elements and isotopes (Uranium)	**1**	28.1	5.6%
7202 - Ferroalloys	**5**	1,812.5	3%
7403 - Refined copper and copper alloys	**7**	478.7	5.1%
2603 - Copper ores and concentrates	**8**	1,852.0	3.9%

Table 4 World ranking in production

Rank	Item	Share
1	Uranium	36.97%
2	Chrome	12.40%
2	Asbestos	20.61%
5	Bismuth	0.99%
5	Cadmium	4.95%
5	Barite	7.30%
6	Rhenium	1.10%
7	Gold	4.02%
7	Sulfur	5.73%
8	Molybdenum	1.80%
8	Zinc	2.82%
8	Coal	1.49%
10	Bauxite (raw ore)	1.17%
10	Silver	3.36%
11	Antimony	0.38%
11	Coking coal	0.63%
11	Copper	2.74%
12	Lead	0.98%
13	Selenium	1.50%
14	Iron and ferroalloys	0.76%

KAZAKHSTAN'S MINING & METALS INDUSTRY 2/2



Experts and companies of the metals & mining industry identify the following key prospects for its development:

- technological modernization of production with a focus on digitalization
- greening and decarbonization
- Industry 5.0 and human-centered approach

ATTENTION TO AND INVESTMENT IN HUMAN CAPITAL DEVELOPMENT IS PARTICULARLY IMPORTANT FOR THE MINING & METALS INDUSTRY

CHALLENGES OF THE MINING & METALS INDUSTRY

Depletion of mineral resources
Most of the explored deposits were discovered during the Soviet period. The lack of modern geological exploration data and technologies limits the possibilities for searching for and developing new resources, which threatens the long-term sustainability of the industry.

High energy intensity and equipment deterioration
The industry is characterized by significant energy consumption, which is associated with outdated technologies and low energy efficiency. To increase competitiveness, large investments are required to modernize production facilities and implement energy-saving solutions.

Shortage of qualified personnel
The MMC is experiencing a shortage of young specialists due to the lack of attractiveness of the professions, difficult working conditions, and the poor image of the industry. This reduces the potential for innovation and slows down productivity growth.

Environmental risks and occupational safety
The growing accumulation of industrial waste and significant levels of environmental pollution remain important issues. The development of recycling technologies can have a significant economic and environmental impact. At the same time, it is important to strengthen the culture of safety and security of employees.

Depending on external economic factors
The industry is vulnerable to sanctions, instability at international markets, and political risks, which requires proactive diversification of export destinations and strengthening of domestic demand.

MMC PERSONNEL DEVELOPMENT PRIORITIES AND OBJECTIVES THAT MEET INDUSTRY CHALLENGES

- **Digital Competencies.** The introduction of automation, industrial IT systems, data analytics, and digital twins requires both the training of new specialists and the systematic retraining of existing employees.
- **Health, Safety and Environment (HSE).** Given the high production risks, companies are reinforcing HSE training through practical training grounds and the introduction of strict occupational health and safety standards.
- **Technical Qualification of Vocational Professions.** Against the background of a shortage of qualified welders, electricians, engine-drivers and operators, the development of corporate training centers, practical training grounds, simulators, VR/AR simulators and dual programs in partnership with colleges is becoming particularly relevant.
- **Environmental and ESG Competence.** Sustainable development requires the training of specialists in environmental management, rational nature management, decarbonization, and industrial waste management.
- **Management and Leadership Skills.** Adapted Executive Education programs and management training courses are being introduced, focusing on strategic thinking, lean manufacturing, project management, and agile approaches.
- **Adaptation of Young Professionals.** The development of a system of mentoring, internships and career support makes it possible to accelerate the professional growth of young employees and increase their retention rate in the company.

DEVELOPMENT OF MMC CU OF KAZAKHSTAN 1/2

Today, CU has become a key tool for implementing corporate strategy and transforming companies, driving innovation and improving business efficiency. In a rapidly changing environment, they are a worthy alternative to traditional business schools and universities, offering practice-oriented training tailored to the specific tasks of the company.

Most MMC companies in Kazakhstan mainly focus on training according to the standards established by legislation and internal regulations, as well as:

- incorporated into talent management systems,
- formed into various organizational structures (training departments, corporate training, training centers, etc.),
- have different priorities, tasks, and activities (administration of training processes, LS development, interaction with educational institutions, development of training infrastructure, research activities, etc.),
- develop systems for sharing experience and knowledge (coaching, mentoring, communities, etc.).

DEVELOPMENT OF MMC CU OF KAZAKHSTAN 2/2

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Despite significant efforts, the development of CU in most MMC companies HAS BEEN LIMITED IN RECENT YEARS DUE TO THE FOLLOWING FACTORS:

~50% **of budgets for personnel training and development of MMC companies include expenses for maintaining training institutions in the regions of presence, taking into account:**

Gap between education and industry requirements
University and college curricula are not always synchronized with the needs of businesses. Students gain theoretical knowledge, but are poorly prepared for the real production environment.

Lack of practical training
Weak development of dual education: the interaction of enterprises and educational institutions remains largely selective. Limited internship opportunities: many students complete their internship formally without access to real equipment.

Outdated equipment in educational institutions
In most universities and colleges, the equipment is outmoded and outdated and does not correspond to the real conditions in enterprises.

Lack of teachers with industrial experience
Teachers rarely undergo internships in production and are not proficient in new technologies. The outflow of qualified specialists to the private sector increases the shortage of personnel in the field of education.

Staff shortages and personnel aging
Young people are not interested in engineering and vocational professions, especially in the regions. The departure of the older generation of specialists is not compensated by the influx of new personnel.

Weak career guidance in schools
Lack of systematic work with young people, especially in small towns and villages. Schoolchildren are not sufficiently aware of the opportunities and incomes available in MMC.

~65% **of labor disputes in MMC were caused by unsatisfactory working conditions and management quality.** As a result, companies prioritized investments in improving social conditions and the working environment, often paying more attention to this than to human capital development.

~70% **of training at MMC is devoted to mandatory programs required by industrial safety legislation.** This limits the ability to divert personnel to other types of training and focus on corporate training. As a result, insufficient attention has been paid to such important areas as the development of new technologies, the digitalization of production processes, the development of middle and line managers, the training of their reserves, and other aspects.

~80% **of corporate training structures do not develop their own programs, but primarily perform an administrative function such as coordinating training between business units and external providers.** This model limits flexibility, reduces adaptability to the company's strategic goals, and makes it difficult to develop unique competencies within the company. Building internal expertise in corporate training is critically important to support technological transformations and increase the competitiveness of the industry.

~90% **of companies implement internal experience and knowledge transfer systems, in which participation is more often financially encouraged. However, these systems are often not integrated into the corporate culture and performance evaluation mechanisms.** This limits the scalability of knowledge, reduces continuity, and slows down the development of competencies at the production level. The formation of sustainable knowledge management systems is becoming critically important to increase efficiency and preserve the industry's expert potential.

BUDGET FOR EMPLOYEE TRAINING AND DEVELOPMENT 1/2
TRENDS

Table 5 Data on budgets for employee training in companies (excluding costs for maintaining educational institutions, training non-company employees, and external educational initiatives)

For 6 MMC companies in the framework of this review	
~2 KZT billion	total budget for employee training and development ranges from KZT 342.5 million to KZT 3.59 billion
~1%	the share of employee training and development costs in total personnel costs range from 0.04% to 1.8%
~102 KZT thousand	average cost of training and development of 1 employee ranges from KZT 5.7 thousand to KZT 189 thousand

Global practice (large and innovative companies)			
Russia	Europe	USA	World leaders
1.28% (0.83 - 2%)	3%	3-5%	3-5%
~ RUR 16,000 (~ KZT 106,000)	~1,100 Euro (~ KZT 670,000)	~USD 1,000 – 1,500 (~ KZT 520-780,000)	~ USD 774 (~ KZT 400,000)

Equivalent in tenge at the NBRK exchange rate as of 07/01/2025

- **The training budget is based on short-term training objectives without taking into account investments in the medium-term and long-term development of the company and its employees.** As a rule, it amounts to at least 1% of costs in accordance with the license and contract terms for subsoil use. This turns investments into a formal expense item rather than a development tool.
- Different training models (internal trainers from among employees, corporate trainers, external providers), as well as the lack of a systematic approach to assessing the impact of training results on the business, **do not allow us to assess the effectiveness of expenses and models for managing training budgets.**
- **Up to 70% of the training budgets are used to implement mandatory safety programs and vocational training for trade jobs.** At the same time, critical areas for the industry's future such as digitalization, technological renewal, and management skills development, remain underfunded and out of focus.
- **There is an imbalance in the allocation of funds: a significant part of investments is directed not to the training of own employees, but to external educational initiatives.** For example, one of the companies surveyed invested KZT 1.3 billion in staff training in 2024, while investments in specialized educational institutions amounted to KZT 3 billion.
- **Some companies have reduced their employee training budgets by about 15%.** For comparison, investment in training in Russia increased by 39% in 2024, and 33% of employers will increase their spending on employee training in 2025, 54% will maintain their budgets at the 2024 level, only 9% will reduce them, and only 4% do not plan to train employees at the company's expense. The average level of training costs in the companies covered by the study is significantly lower than in the United States, Canada, and European countries, where large and innovative companies invest in staff development to ensure competitiveness and adaptability in the face of market transformation. Small and medium-sized companies seeking rapid breakthroughs can make a one-time investment in training equivalent to 2-3 annual worth of payroll.

BUDGET FOR EMPLOYEE TRAINING AND DEVELOPMENT 2/2 TRENDS

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In most MMC companies, budgets for employee training and development are formed without taking into account actual needs. The MMC CU are developed within the framework of approved training budgets, without additional funding from companies.

- Training is not just an expense, but a strategic investment in the development of the company. With insufficient funding for training programs, the company risks losing its capacity for growth, innovation, and maintaining competitiveness.
- The practice of allocating at least 1% of the payroll fund to training is a minimum threshold, not a benchmark. In global practice, training budgets often range from 2% to 5% of total personnel costs.

Why it is important to allocate budgets systematically:

- MMC companies operate in conditions of high technological and operational complexity, where a low level of competence creates direct risks to safety, quality and production efficiency.
- Without separate and flexible financing, it is impossible to implement modern training forms such as digital platforms, peer-to-peer training, mentoring, internal coaching and other innovative methods. It also hinders the development of corporate universities (CU), including the creation of infrastructure and modernized training models with digital simulations and video courses.
- Investing in CUs means capitalizing of knowledge within the company, reducing dependence on external contractors, and accelerating adaptation of new employees.
- The global leading MMC companies, such as BHP, Rio Tinto and Vale, are actively investing in their own training centers and platforms, turning them into the core of knowledge and innovation management.
- Without modern infrastructure, CUs risk remaining only external training administrators, rather than strategic business partners.

Opportunities for improvement:

- Plan the training budget based on future needs among other things. Allocate separate budget items for key areas: leadership development, digital skills, mentor training.
- Create a sustainable funding model for CU as an internal provider of knowledge and transformation, rather than just an executor of formal programs.
- Allocate a separate budget for the development of CU: training of internal trainers and methodologists, development of courses, purchase of simulators, software, platforms, creation of a digital library of knowledge.
- Invest in the learning infrastructure such as classrooms, mobile classrooms, online assessment and tracking systems for competencies, and practical training grounds.
- Link investments in training to the company's actual business performance, i.e., evaluate not only the costs but also the results of training: productivity, retention, speed of adaptation, and growth of the internal talent pool.

PLACE IN THE COMPANY AND CU MANAGEMENT TRENDS AND RESULTS

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Table 6 Comparison of positions in the company and CU management

Region / Country	Organizational form of CU	Subordination of the Director / Head of CU	CU management	Typical management practices
MMC CU of Kazakhstan	A division or department within HR, a separate unit within the company	HR Director or HR Department	Mostly by the HR Director or HR Department	Two key options: ▪ Linear administration, focus on 'on-demand' training, low autonomy; ▪ Partially autonomous and sometimes participate in strategic initiatives
CU of Russia (large companies)	A Division of the HR Department or a Subsidiary	HR Director or CEO of the company	Supervisory / Academic Board	Matrix management, KPI with a focus on learning outcomes, active role in strategy implementation
CU of Europe (large corporations)	Competence Center / University structure	C-level: Chief Learning Officer, HR, CEO	Learning Governance Board, Academic Board	Agile structures, project management, training as part of a business strategy
CU of USA (corporate giants)	CU as an independent unit or division of Global Learning	L&D Director or Chief People Officer	Faculty Council, Learning Advisory Board	Full autonomy, own budget, long-term strategies for developing leaders and innovations
Global CU Leaders (Global Platforms)	University — strategic platform / ecosystem	C-Level, participation in the Board of Directors	Global Learning Council, Expert Panels	Global knowledge management, unified standards, digital transformation through CU

Organizational and legal form of MMC CU of Kazakhstan:

17% are formed as separate departments, 63% are part of the HR Management divisions.

Most CUs are responsible for training and development and do not play a leading role in business transformation.

The Academic Board (or similar expert body) is not always present in CUs, but mature and strategically oriented CUs have similar structures, often named in different ways.

Only one of the six MMC CUs that participated in this review has an Academic Board of CU involving top management and leading internal and external experts.

Why this is important for the development of both individual MMC companies and the industry as a whole:

The lack of the CU autonomy reduces the effectiveness of its activities. Without Expert or Academic Board, CU risks remaining a technical service rather than a strategic business partner. Such council transforms training into a tool for quality, change, and leadership development.

Opportunities for improvement:

1. The growth of CU expertise to the level of a business partner, a transformation leader, and not just a structure responsible for training.
2. Introduction of full-fledged CU Academic Boards with the participation of business leaders, internal and external experts, including the following competencies:
   - approval of curricula and approaches
   - assessment of content and methodology quality
   - development of training strategies
   - involvement of experts from business and science
   - accreditation of internal programs
   - discussion of innovation implementation.

EXPERIENCE AND KNOWLEDGE TRANSFER PRACTICES

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Companies in Kazakhstan are beginning to actively develop knowledge and experience transfer systems, but this practice is just shaping. There are several challenges at the moment:

Lack of consistency: many companies train coaches and leaders, but the processes remain spontaneous and not integrated into the overall development strategy.

Difficulties of standardization: mentoring and training programs are not always standardized, which makes them difficult to scale and reduces their efficiency.

Limited resources and initiatives: the introduction of internal trainers is often limited to one-time initiatives that do not support long-term business goals.

Lack of strategic connection: the development of internal expertise is not always linked to the overall goals of the company, which reduces its effectiveness.

Table 7. Comparison of experience and knowledge transfer practices in large companies

Practice	Kazakhstan	Russia	Europe	USA	World leaders
Apprenticeship	Often conducted in a formal manner	Formalized, integrated into business processes	Integrated into HR strategies	Standardized (clear system)	Basic part of adaptation
Mentoring / Coaching	rare and unstructured	Exists at middle and top levels mainly	Widespread	Used everywhere	The core of leadership development
Internal coaching	Almost never used	Developed in most CUs	Actively supported	Clear policies and motivation	Expanding as an alternative to external providers
Community of Professionals (CoP)	Poorly developed	Large CUs use AI for community moderation	Integrated into the business	Widespread	Widely used in agile and innovation
Knowledge Bases/ Wiki	Available but not updated	Actively developing	Implemented in a digital environment	Standardized	Required CU component
Job shadowing / Rotations	Almost never used	Industry-specific approach, there are cross-industry programs	Used on a regular basis	Standard in large corporations	Agile approach to learning
Peer-to-peer training	Infrequently or on a limited scale	Widely developed in leading CUs, not systematically used in others	Embedded in the culture	Widely developed	Massively implemented
Digitalization / AI/ Simulators	Pilots, poor consistency	AI is actively developing, and there are simulators in the industrial sector	Expanding	Integrated into LXP/HR Tech	New global standard
Employee participation in the development of training programs	by an initiative of specialists mainly	Actively developing, must-have in the leading CUs	Systematic, involvement at all stages	Mandatory process in innovative companies	Accepted in companies with a high level of engagement

LEADERS TEACH LEADERS SYSTEM TRENDS

In order to ensure the sustainability of systems for the transfer and preservation of experience and knowledge, companies are increasingly interested in the Leaders Teach Leaders System, which is the basis for strong corporate training structures/CUs.

Within this system, managers and highly qualified specialists within the company transfer their knowledge and experience to other potential leaders within the company. This system emphasizes mentoring, experience sharing, and the development of leadership skills among employees.

Leaders Teach Leaders is an important tool for developing leadership and continuity within a company, helping to strengthen company culture and ensure successful management in the future by increasing employee engagement.

Table 8. Data on the implementation of the Leaders Teach Leaders System

Region / Country	Availability of Leaders Teach Leaders System	Characteristics and maturity of the practice
Kazakhstan	**In its infancy**	The system is just beginning to take shape. In most companies, it is **ad-hoc and non-systemic in nature**, without integration into HR strategies.
Russia	**Widely developed**	In large, mature companies **(Sberbank, Rosatom, NLMK)**, the "Leaders Teach Leaders" system is embedded in the development strategy and corporate culture, and is formalized by regulations. All companies with corporate universities incorporate elements of this system.
Europe	**Stably implemented**	Implemented in large companies (**Siemens, Shell, Unilever**). It is often combined with coaching, mentoring, and internal academies.
USA	**Widespread**	It is embedded in the corporate strategy, and is actively used by **GE, IBM, and Google**. It is clearly structured, a part of leadership development.
World leaders	**Recommended as the best practice**	It is used globally, especially in innovation-oriented and international companies as a tool for developing continuity and leadership.

In the world, the Leaders Teach Leaders system is recognized as effective for sustainable leadership, knowledge transfer and the formation of a culture of development within a company.

In the USA and Europe, it is part of mature HR strategies and leadership development programs.

In Russia, the practice is widely developed, there is a generalization in the form of books such as NLMK's Book of Coaching Recipes, coaching clubs and communities.

In Kazakhstan, the system is attracting interest, but there is still a lack of methodology, support and integration.

LEADERS TEACH LEADERS SYSTEM
RESULTS

Table 9. Roles and involvement of employees in the Leaders Teach Leaders System: average indicators for MMC CUs of Kazakhstan

127
internal coaches

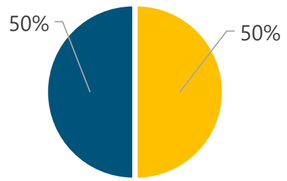
16
hours per year are allocated by the managers for teaching

10%
of top managers participate in the system

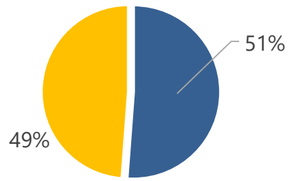
100%
of CUs have training programs for internal trainers

35%
of training volume is implemented by CUs, 65% by providers

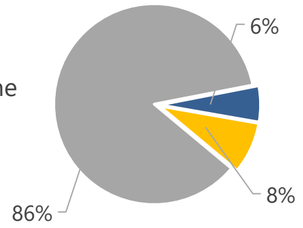
EXPERTS
The share of employees involved in LS development, %



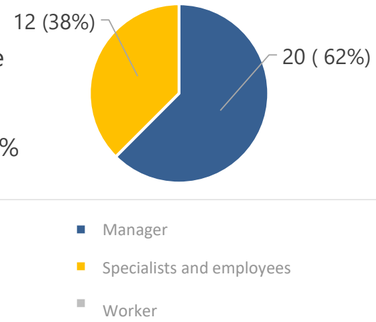
INTERNAL TRAINERS
The share of employees involved in LS, %



MENTORS
The share of employees involved in in the on-the-job transfer of experience and knowledge, %



OTHER ROLES
The share of employees involved in the transfer of experience and knowledge, development of others (sponsors of project teams, coaches, mentors, etc.), %



The Leaders Teach Leaders System is in its infancy in the majority of MMC CUs in Kazakhstan:

- Companies recognize its value, but there is no systematic approach so far: one-off initiatives and individual projects that are not integrated into the personnel development strategy.
- Each CU operates as a closed ecosystem, where knowledge transfer depends on the company's culture, the maturity of HR practices, resources, and the position of top management.
- In many cases, leaders participate in the training at the initiative of HR, rather than as part of their managerial responsibility. This makes such training formats formal and insignificant in terms of the company development.

Why this is important for the development of both individual mining & metals companies and the industry as a whole:

- Leadership continuity is impossible without the transfer of experience from current leaders.
- The shortage of middle management personnel requires targeted development of internal leaders.
- Internal training by leaders reduces costs of adapting external candidates and strengthens corporate culture.

What can be improved for development of the system:

- Integrate the Leaders Teach Leaders system into the HR strategy and KPI.
- Develop common methodologies and standards for such programs.
- Motivate managers to participate on an ongoing basis.
- Evaluate the results through growth of competencies and willingness of successors.

2 GENERAL PROFILE OF MMC CU

GENERAL PROFILE OF MMC CU OF KAZAKHSTAN
TRENDS AND RESULTS

YEARS OF ESTABLISHMENT
2012-2023

GEOGRAPHY AND LOCATION
CUs in Kazakhstan are mainly represented by large and leading enterprises, which emphasizes their key role in the country's economy. The opening of CU is considered as a strategic decision that requires significant resources for successful implementation.

Location of the headquarters of MMC CUs:
- Almaty (Kazatomprom, Altynalmas)
- Astana (ERG Kazakhstan)
- Temirtau (Qarmet)
- Ust-Kamenogorsk (Kazzinc)
- Karaganda (Kazakhmys)

LICENSES AND CERTIFICATES
100% of MMC CUs have a certificate for the right to carry out work in the field of industrial safety.

AVERAGE AREA OF THE EDUCATIONAL INFRASTRUCTURE
6,724 m2
The range is from 177 to 13.5 thousand m2

AVERAGE NUMBER OF TRAINING CENTERS/LOCATIONS
5
The range is from 1 to 11

AVERAGE NUMBER OF CLASSROOMS
50
The range is from 6 to 96

AVAILABILITY OF ONLINE LEARNING PLATFORMS
100%

AVAILABILITY OF LS DIGITIZATION STUDIOS/CENTERS
33%

Corporate Universities have a well-developed material base, which confirms the growth of companies' maturity and their interest in developing corporate training and development institutions:
90% of CUs have their own classrooms, the remaining 10% use infrastructure of partner (sponsored) educational institutions, which provides a stable opportunity for full-time and blended learning modes.

Adaptability to challenges and digital trends has ensured rapid development of distance and hybrid learning:
CUs are equipped with hybrid mode classrooms, which indicates system integration of digital technologies and readiness for scaling.

Ceation of studios/centers for digitizing learning materials emphasizes transition from formal training to more modern and engaging content:
This enhances engagement and quality of learning, especially in digital environment.

Focus on developing proprietary online learning platforms reflects strategic independence of CUs and their focus on specific business needs.
This approach makes it possible to adapt training to corporate standards, processes and culture as much as possible.

CUs do not have educational licenses:
This does not limit their activities in any way.

Why this is important for business and how to enhance the effect
Contributing to development of the infrastructure and technological maturity of CUs forms a basis for sustainable scaling of programs, increasing their flexibility and effectiveness. This is critical in the context of growing demand for skilled labor, the MMC digitalization and the need for rapid adaptation to changes.

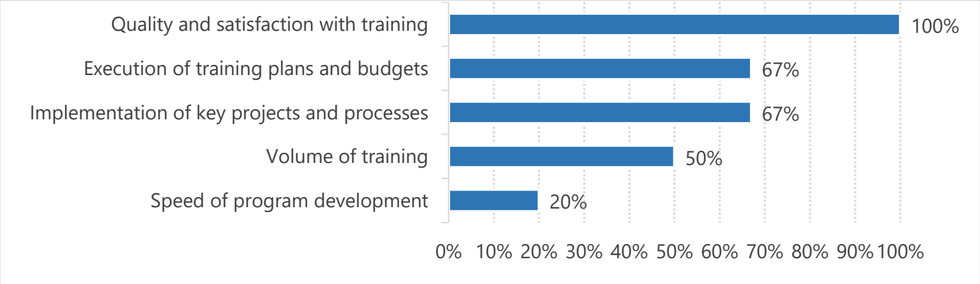
TYPES OF ACTIVITIES AND CU KPIs TRENDS AND RESULTS

KEY ACTIVITIES OF CUs

Table 10 The share of CUs by type of activity, %

KEY KPIs OF CUs

Table 11 The share of CUs by the presence of KPIs



The top three CU KPIs reflect the focus on:

- The effectiveness of the programs and the level of satisfaction of the participants and customers of the training.
- Implementation of key HR projects such as development of the reserve and key employees.
- The scale of training including the number of trainees, the number of programs, and the coverage of target groups. This is critical for business, as it directly affects the quality of personnel, their readiness for tasks and sustainability of development.

A blended model of the organization of CU units prevails. This model is considered effective in terms of global practice, providing flexibility, adaptability to changing business demands, and the possibility of comprehensive staff development coverage:

- by functions, for example, LS development, administration and training organization, planning and budgeting,
- by program type, such as academies, schools, faculties, and areas of study.

Functional specialization, such as interaction with educational institutions, personnel assessment, and other activities, remains the basic structure of most corporate universities. This ensures consistency, but risks becoming inert without elementary integration into the business strategy. Disparate functions lose touch with the company's priorities and reduce flexibility in responding to changes.

Fragmentation of CU activities between different units, integrity of the educational strategy, and effectiveness of assessing its impact. For example, the Corporate University only administers compulsory training, while strategic programs are implemented by other structures.

Some CUs include staff assessment as part of the development cycle, which is in line with best practices (Learning Needs Based on Assessments). This is critical for targeted development and HR planning, development, and scaling of training programs for a consistent employee learning experience.

CUs coordinate interaction with universities, acting as an entry point for the implementation of large-scale educational projects.
These are mainly specialized and large Kazakhstani educational institutions.

Opportunities for improvement:

- The blended model of organizing CU units, given the large number of participants in the learning process (CU, business, HR, top management, etc.), requires a high level of coordination, clear regulations, and resource support.
- To ensure the order and consistency of the functional structure of CU, it is important to integrate it with the company's business goals.
- The fragmentation of CU activities can reduce the integrity of the educational strategy and the effectiveness of assessing its impact, so it is important to define/divide the competencies of CU with other units.
- The development of practices for LS developing and assessing competencies based on CU, as well as international partnerships, enhance the accuracy of training and the quality of LS, which is important for preparing personnel for business tasks.

TARGET AUDIENCE
TRENDS AND RESULTS

ERG CU
Eurasian Resources Group
Corporate University

INTERNAL TARGET AUDIENCE

~29 thousand pers.

The range is from 4.9 to 59.5 thousand

- 78% - vocational professions
- 13% - specialists, office employees
- 9% - managers

AVERAGE TRAINING COEFFICIENT

~2.3

The range is from 0.64 to 4.05

- It is calculated as a ratio of the number of trainings conducted to the number of employees
- It allows to understand how actively the company invests in personnel training and development.

AVERAGE DURATION OF STUDY / YEAR

Table 12 Average number of contact hours of training per year

Personnel category	KAZAKHSTAN'S MMC	Russia	Europe	USA	World leaders
Senior management	**17.6 hours**	16-30 h	30-50 h	40-60 h	30-50 h
Middle management	**17.5 hours**	20-30 h	25-40 h	30-50 h	25-40 h
Line management	**19.3 hours**	20-30 h	20-30 h	25-40 h	20-30 h
Specialists	**17.5 hours**	25-40h	15-25 h	20-30 h	15-25 h
Vocational professions	**40 hours**	40 h	25 h	48 h	20-40 h

- In terms of the target audience, Kazakhstan's MMC CUs are not only major centers for meeting the educational needs of their companies, but also contribute to the development of the country's economy. Collectively, the review participants provide education and development for more than 174,000 adult citizens of Kazakhstan.
- According to international practices, the training coefficient is 2.5–3. At first glance, the indicator for Kazakhstan's MMC is in this range. At the same time, it should be noted that in most companies, training focuses primarily on basic industrial safety courses, while other types of training are significantly less common.
- The number of hours of training also indicates the priority of safety, especially for vocational professions, as required by law. In large international companies, the training coefficient per employee for other categories of personnel and types of training is usually higher due to the emphasis on the continuous development of employees at all stages of their professional path.
- The companies that participated in the review provided training for contractors in some cases. This process has significant potential, as training contractors' employees on company standards and characteristics can improve safety, quality, and production culture, as well as reduce risks and ensure uniform requirements for all participants in the production chain.

Opportunities for improvement:

- Implement more standardized and scalable educational solutions for all categories of personnel, focusing not only on safety requirements, but also on improving professional qualifications.
- Increase participation of workers, specialists, and managers in educational programs through regularity and accessibility of training.
- Consider creating training systems for contractors based on the CU, which will strengthen control over the quality and safety of work, as well as reduce production and operating costs.

CU TEAM 1/2
TRENDS

ERG CU
Eurasian Resources Group
Corporate University

A large, competent, and digitally equipped team is the main CU asset,
which the effectiveness of corporate training and business development depends on.

Table 13 Comparison of data by CU teams

Region	~ Team size (staff)	Main profiles and roles	Level of maturity and experience	Employee share with experience in other areas (%)	
MMC CU of Kazakhstan	**47 pers.** The range is from 10 to 123 pers.	Training administrators, methodologists, trainers, administrators, coaches and mentors of mainly industrial training and industrial safety training.	Average. They often combine roles, have little expertise in EdTech and analytics. There is often production experience.	**17 %** The range is from 0 to 44%	A small percentage. They are mostly internal specialists, with few international connections. There are several specialists with experience in international CUs.
CU of Russia (large companies)	88 pers. (10-600 pers.)	CU Head, project managers, methodologists, trainers, EdTech specialists, facilitators.	High. They are actively implementing best practices, intensive exchange of experience within the country, developing predictive analytics, AI, knowledge management systems, and scaling the structure with internal development schools.	37% (20-50%)	In recent years, the number of employees with work experience in large CUs has been growing (Sberbank University, Rosatom Corporate Academy, Russian Railways University).
CU of Europe (large corporations)	100-250 pers.	L&D designers, data-driven learning experts, coaches, researchers, AI developers, UX specialists.	High. Strong expertise in training design and performance evaluation.	40–60%	There is a high proportion of specialists who come from other CUs and educational institutions.
CU of USA (corporate giants)	200-400 pers.	Specialists in Instructional Design, Learning Architecture, Business Analytics, and Corporate Strategy.	Very high. They often have academic degrees and experience in top EdTech companies.	60–80%	Most of the team has experience in large international CUs (for example, IBM, Google).
World Leaders (global platforms)	400+ pers.	Global teams by region, divided by functions: strategy, platform, content, data.	Benchmark. Experience in knowledge systems management, AI implementation, LXP/LMS.	70–90%	A hybrid model, where a significant proportion of the team has international experience in business development and consulting.

CU TEAM 2/2
TRENDS

ERG CU
Eurasian Resources Group
Corporate University

Small CUs often combine roles, one person can be a methodologist, a trainer, and an LMS administrator.

- The teams of MMC CU are small and mainly consist of administrators and internal specialists of mature age (the average age is 39.5 years). Only about 17% of employees have work experience in CUs of other companies, which indicates a shortage of professional L&D personnel in the country's market.
- Not all employees of MMC CU participate in the development of programs or transformational initiatives. More often, they are only involved in organizing training.
- A significant part of LS is transferred to external contractors, which limits the development of internal expertise.

In large corporations, staff is only a visible part, the rest are external contractors, partners, and platforms.

Regions with more mature corporate practices (USA, EU) have historically invested in their own development centers and the development of their teams, which makes it possible to effectively implement large-scale educational programs.

Why this may be critical for CU activities and a company:

- **Without a strong team, CU is not a strategic asset, but a costly department:** CU = a business transformation tool. Modern CUs don't just teach, they create a culture of change, develop leaders, and support digital transformation. This becomes a formality without a competent team.
- **A strong team is essential for effective training.** Methodologists without development and EdTech skills → weak online courses. Lack of analysts → it is impossible to measure the effect. Lack of leadership coaches → culture and practice are not passed on.
- **Strong CU management team reduces external costs.** Less spending on external providers. Faster adaptation to business objectives. ROI increases due to learning.
- **Competition for talent = necessity.** The best employees choose companies with growth opportunities. CU becomes the 'internal university' of a career. Strong CU team retains and develops people.
- **Competencies of the CU team = driver of quality, speed and innovation.** Example: methodologists can run programs in weeks, not months.

Opportunities for improvement:

- **Increase the number and functional depth of CU teams**, include methodologists, digital designers, analysts, and trainers.
- **Develop competencies internally:** train the team in modern L&D practices, analytics, approaches to course development, and knowledge management.
- **Attract specialists with experience from other CUs,** including international ones, to implement best practices.
- **Integrate CU into the company's strategy:** link learning with transformation, leadership development, and talent pool.

LS PORTFOLIO OF CU 1/2
TRENDS

AVERAGE NUMBER OF LS IN CU PORTFOLIO

1,198 The range is from 182 to 2400+

AVERAGE COEFFICIENT OF LS UPDATE

44% FOR 2024

Table 14 Average indicators for the use of LS design/development tools, %

LS DESIGN / DEVELOPMENT TOOLS	
Interviews/focus groups/polls	**83%**
Feedback from external and internal clients	**83%**
interviews with top management	**83%**
Company strategy analysis	**67%**
Analysis of global trends in corporate training	**67%**
Analysis of benchmarks/best practices of other companies	**67%**

Table 15 Average indicators by forms and type of LS portfolios developed by CU, %

	LS forms			LS types			
Region/ country	**Offline**	**Online**	**Blended**	**Hard skills:** production and compulsory courses	**Hard skills:** support functions	**Soft skills:** management, leadership, communication	**Soft skills:** interpersonal skills, adaptability
MMC CU of Kazakhstan	56%	25%	18%	78%	14%	4%	4%
CU of Russia	29%	46%	25%	30%	30%	31%	9%
CU of Europe	30%	40%	30%	25%	30%	30%	15%
CU of USA	20%	50%	30%	20%	30%	35%	15%
World leaders	25%	45%	30%	25–30%	25–30%	30%	10–15%

Table 16 Average indicators by areas/topics of LS portfolios developed by CU, %

LS directions	
Vocational training for a trade job	**56%**
Mandatory safety training	**28%**
Corporate programs for production and support functions	**6%**
Personnel reserve development programs	**4%**
Supporting functions	**3%**
Programs for managers and their talent pool	**3%**
Production areas/functions	**1%**

LS PORTFOLIO OF CU 2/2
RESULTS

ERG CU
Eurasian Resources Group
Corporate University

CU is a key instrument of operational sustainability. But to support long-term growth and transformation, it is necessary to have
A SHIFT FROM A FOCUS ON EXECUTION TO A FOCUS ON DEVELOPMENT AND PROACTIVE TRAINING.

The dominant focus in the LS development is on hard skills (90%), especially in production and mandatory topics. This reflects a strategic priority for professional development in key business areas.

Strong dependence on external resources. Programs taught by CU trainers or internal trainers of companies are mainly dedicated to industrial safety and industrial training for trade jobs. Most companies use external partners/suppliers for other types of training.

CU interpret the concept of LS in different ways starting from comprehensive courses to individual modules and microlearning.

This makes it difficult to compare, manage, and systematize a portfolio.

68% of LS are initiated by top managers and functions. This indicates strategic connection of training with current business objectives.

The following is important to pay attention to:

- The focus on hard skills helps ensure stability and safety of production processes, especially in MMC and other capital-intensive industries. The lack of systematic work with soft skills, leadership, and adaptation in some companies can limit growth, especially in the face of changes and technology adoption.
- In-house development of CU programs is critical when it comes to specific corporate standards, production processes, internal culture, safety, and adaptation of new employees. This allows you to accurately take into account the business context and quickly update content for changes, enhances sustainability of knowledge in the company, promotes formation of internal expertise and strengthens the link between training and strategy.
- Lack of standardization in some CUs, as well as different approaches to the interpretation and accounting of LS hinder strategic management of training, monitoring progress and comparability between regions/departments.

Opportunities for improvement:

- **Systematize the portfolio:** a unified approach to classification (by level, duration, form) and regular audit of content and relevance.
- **Optimal LS development model:** a combination of in-house development on key operational topics and targeted involvement of external providers for the development of soft skills, strategic and transformational competencies, with the condition of strengthening the development of competencies in the CU development practice.
- **Increase the share of soft skills:** especially in terms of managerial, team and adaptive competencies for specialists and managers at all levels.
- **Develop a hybrid model:** use a combination of internal content and external suppliers (including international ones) for strategic and innovative directions.
- **Strengthen the link with business objectives:** the launch of programs should be based on clear business cases, and not only on requests 'by inertia'.

3 PROFILE OF MMC CU THAT TOOK PART IN THE REVIEW

ERG KAZAKHSTAN CORPORATE UNIVERSITY 1/4

DATA BASED ON THE RESULTS OF 2024

ERG CU
Eurasian Resources Group Corporate University

PROFILE

Year of foundation: 2023

Location of the CU Head Office: Astana city

Organizational and legal form: CU as part of ERG Service Center LLP

Company website: www.erg.kz

Collective governing body of CU: Academic Board

Subordination of the Director of CU: to the Deputy General Director for Personnel and Culture of ERG Kazakhstan

Clients: company employees (~60,000 pers.)

Budget for the training of ERG Kazakhstan employees: KZT 2,967 million

Share of the training budget from the payroll budget: 1%

Budget for 1 employee: ~ KZT 49,450

LEGITIMACY

Certificate for the right to carry out work in the field of industrial safety

EDUCATIONAL INFRASTRUCTURE

- Total area: 13,500 sq.m
- Number of training centers/locations: 11
- Number of classrooms: 68
- Online learning platform: LMS (Moodle)
- Number of studios/centers for digitizing courses and programs: 3

AREAS OF TRAINING

1. Mandatory safety training
2. Vocational training for trade jobs
3. Executive programs
4. Personnel reserve development programs
5. Corporate programs for production and support functions

TYPES OF ACTIVITIES

1. Development of courses and programs
2. Digitization of courses and programs
3. Training of internal trainers
4. Training organization
5. Administration of training
6. Organization of corporate events
7. Research activity

EDUCATIONAL PARTNERSHIPS AND RECOGNITION

Alliance of colleges and ERG (23 colleges and 3 universities)

K.I. Satbayev KazNRTU NJSC

Narkhoz University NJSC

EIP EFMD Gold Award in Professional Development 2024 for the Vocational Training Project

Grand Prix in Innovative Learning Solutions, Human Capital Forum 2024

Certification of Lift-Leading Learning with Impact according to EFMD Standards, 2025

ERG KAZAKHSTAN CORPORATE UNIVERSITY 2/4

DATA BASED ON THE RESULTS OF 2024

ERG CU
Eurasian Resources Group
Corporate University

PRINCIPLE OF ORGANIZATION OF CU UNITS

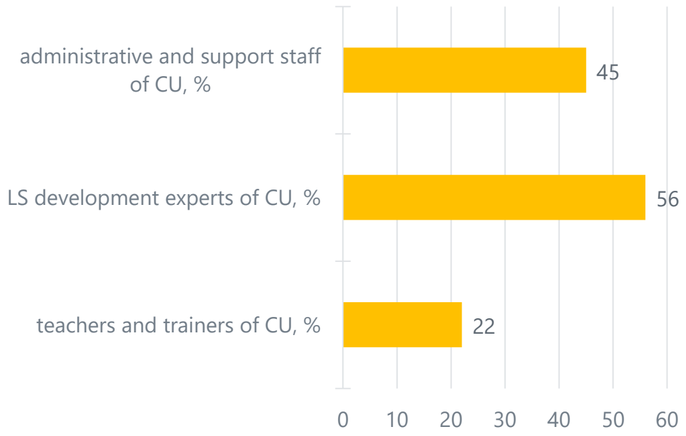
By areas of activity:

- development of courses and programs
- managing internal trainers
- regional educational infrastructure management
- educational analytics and automation of training services

By areas of training:

- academies, faculties / areas of study within Academies

STRUCTURE AND TEAM



123 full-time employees

30 is average age

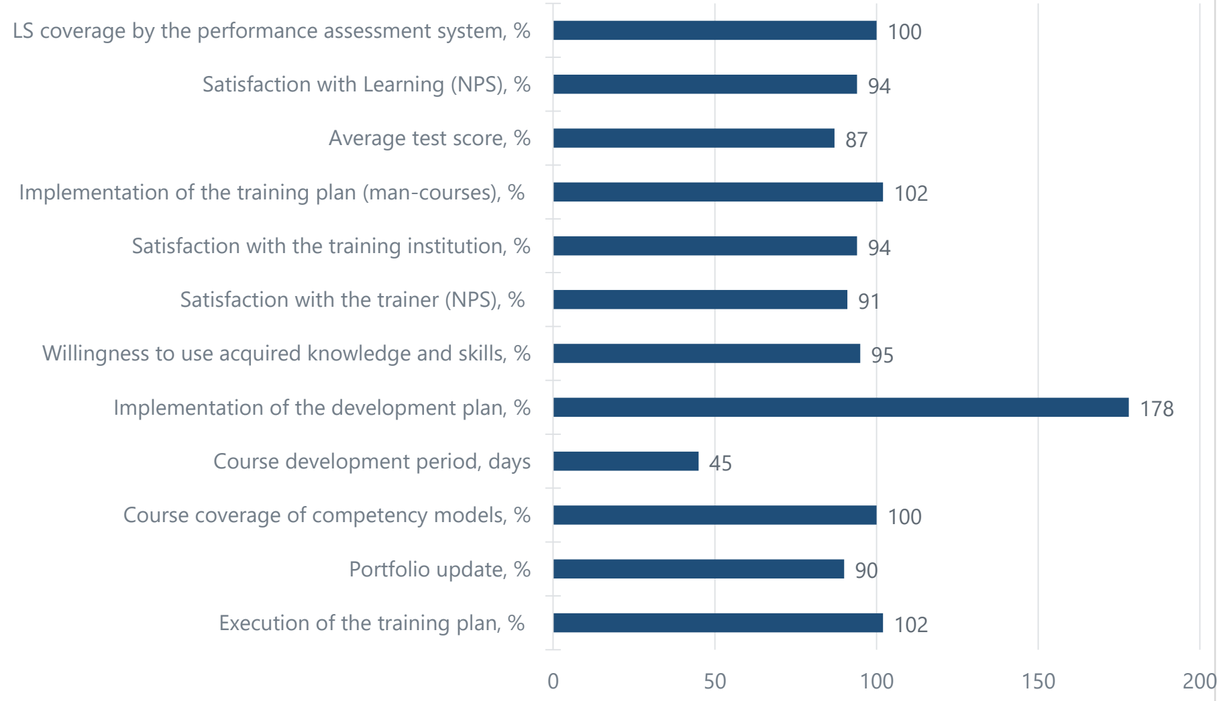
10% has work experience in other CUs

CU PERFORMANCE METRICS

The main types of key performance indicators for CUs in 2024:

- volume of training
- quality and satisfaction with training
- speed of program development

Key performance indicators for CUs in 2024:



ERG KAZAKHSTAN CORPORATE UNIVERSITY 3/4
DATA BASED ON THE RESULTS OF 2024

Eurasian Resources Group Corporate University

TARGET AUDIENCE

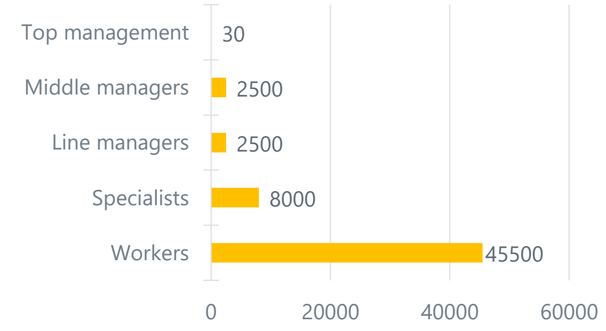
175.9 thousand
man-courses trained at CU

2.9 training coefficient per employee (number of trainings/ number of employees)

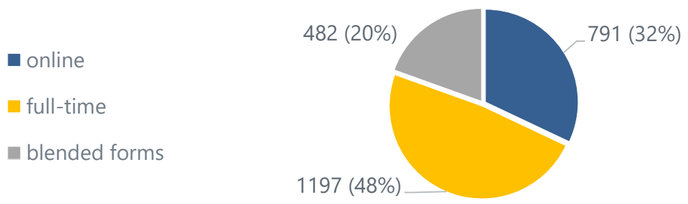
99% of the trainings were conducted by CU in 2024

90% average update rate in 2024 for programs developed in 2023.

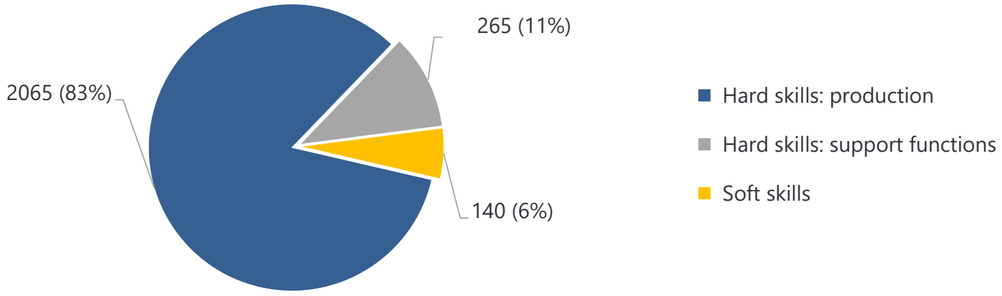
Number of employees of ERG Kazakhstan



Training form

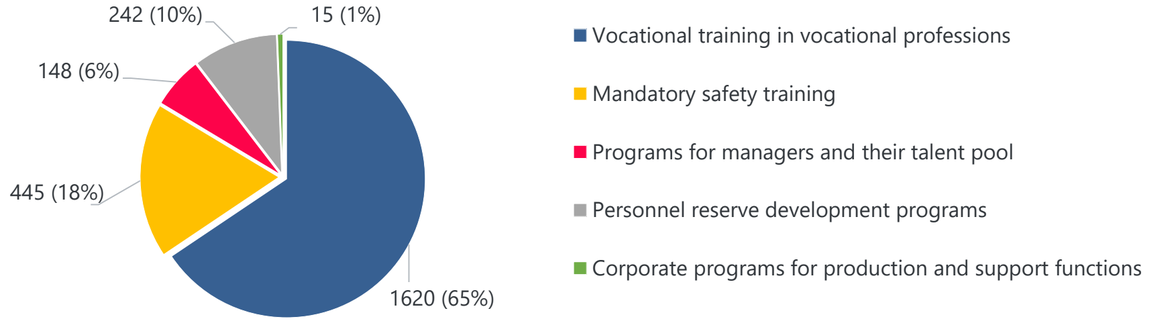


Share of courses and programs by development directions



PORTFOLIO OF COURSES AND PROGRAMS

2,470 - total portfolio of courses and programs



CU tools for designing a portfolio of courses and programs, determining the need for corporate training

- company strategy analysis
- interviews with top management
- interviews/focus groups/surveys
- analysis of global trends in corporate training
- analysis of benchmarks/best practices of other companies
- feedback from external and internal clients

Top 3 training topics in 2024

Soft skills
- Team formation
- Public speaking
- Standard management practices

Hard skills: support functions
- Maintenance and repair processes
- Enterprise Economics and Finance for Managers
- Industrial relations

Hard skills: production
- OEE calculation practice
- Improving the efficiency of production processes
- Mining

ERG KAZAKHSTAN CORPORATE UNIVERSITY 4/4

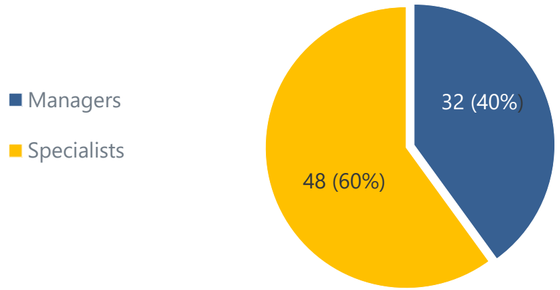
DATA BASED ON THE RESULTS OF 2024

ERG CU
Eurasian Resources Group
Corporate University

The activities of ERG Kazakhstan CU are based on the Leaders Teach Leaders system, which promotes the preservation and transfer of experience and knowledge, creating value and uniqueness for CU courses and programs.

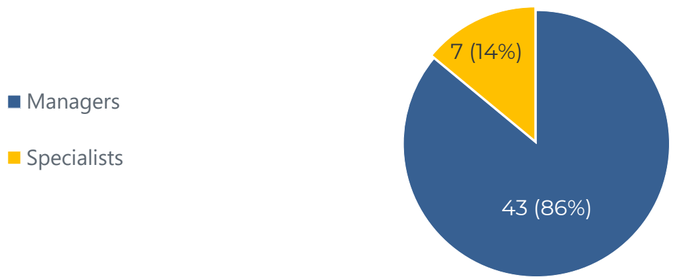
EXPERTS, 80 pers.

Share of staff involved in course and program development, %



SPEAKERS, 50 pers.

Share of employees participating as speakers in educational and corporate events, %

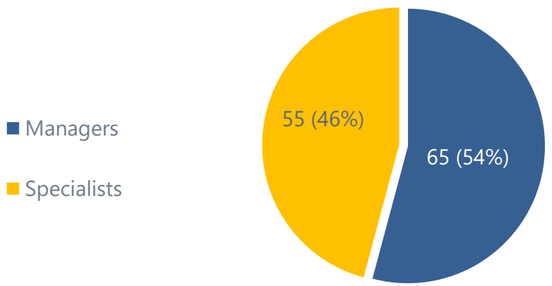


6,300+

of employees of various categories participate in the Leaders Teach Leaders system (transfer of experience and knowledge, development of others)

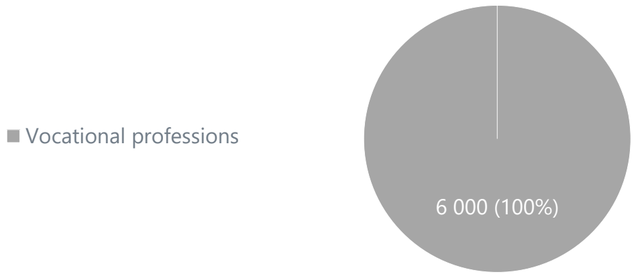
INTERNAL COACHES, 120 pers.

Share of staff involved in the delivery of courses and programs, %



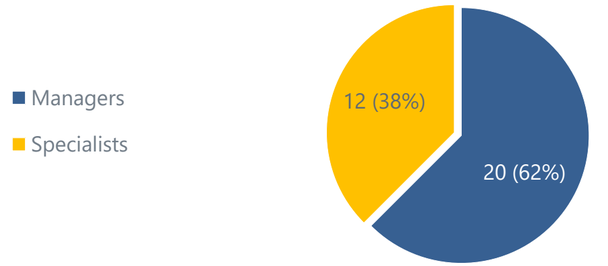
MENTORS, 6,000 pers.

Share of employees participating as mentors in in-house training, %



OTHER ROLES, 32 pers.

Share of employees involved in the transfer of experience and knowledge, development of others (sponsors of project teams, coaches, mentors, etc.)



TRAINING AND DEVELOPMENT DIVISION OF THE PERSONNEL ADMINISTRATION AND DEVELOPMENT DEPARTMENT OF THE HR AND ORGANIZATIONAL DEVELOPMENT DIRECTORATE OF KAZAKHMYS 1/4

DATA BASED ON THE RESULTS OF 2024

PROFILE

Year of foundation: 2014

Location: Karaganda city

Organizational and legal form: a division within the Personnel Administration and Development Department of the HR and Organizational Development Directorate of Kazakhmys Corporation LLP

Company website: www.kazakhmys.kz

Collective governing body: none

Subordination of the Head of the Department: to the Director of the Personnel Administration and Development Department

Clients: company employees (~39,000 pers.)

Budget for the training of Kazakhmys employees: KZT 1,460 million

Share of the training budget from total personnel costs: 0.3%

Budget for 1 employee: ~KZT 64,403

LEGITIMACY

Certificates for the right to carry out work in the field of industrial safety on the basis of subordinate Corporate colleges and training centers of companies/branches

EDUCATIONAL INFRASTRUCTURE

It is organized on the basis of educational institutions, partner providers, and rented premises:

- Total area: 10,670 sq.m
- Number of training centers/locations: 2
- Number of classrooms: 96
- Online learning platform: LMS (Cuba)
- Number of studios/centers for digitizing courses and programs: none

AREAS OF TRAINING

1. Mandatory safety training
2. Vocational training for trade jobs
3. Executive programs
4. Personnel reserve development programs
5. Corporate programs for production and support functions

TYPES OF ACTIVITIES

1. Development of courses and programs
2. Digitization of courses and programs
3. Training of internal trainers
4. Training organization
5. Administration of training
6. Organization of corporate events

EDUCATIONAL PARTNERSHIPS AND RECOGNITION

- KPMG Taxes And Advisory LLP
- McKinsey & Company, Inc.
- Association of Project Managers of the Republic of Kazakhstan
- K.I. Satbayev KazNRTU NJSC

TRAINING AND DEVELOPMENT DIVISION OF THE PERSONNEL ADMINISTRATION AND DEVELOPMENT DEPARTMENT OF THE HR AND ORGANIZATIONAL DEVELOPMENT DIRECTORATE OF KAZAKHMYS 2/4

DATA BASED ON THE RESULTS OF 2024

PRINCIPLE OF ORGANIZATION OF CU UNITS

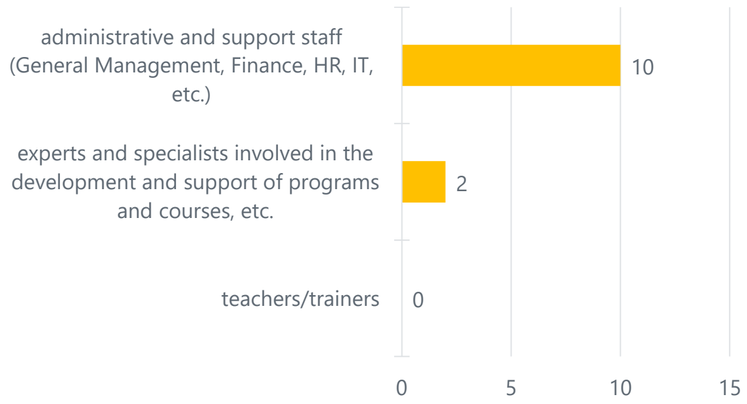
By areas of activity:

- organization of traning process
- formation of plans and budgets
- personnel certification, knowledge assessment
- adaptation process
- interaction with colleges, secondary and higher education institutions

By areas of training:

- areas of training

STRUCTURE AND TEAM



12 full-time employees

44 is average age

41.67% has work experience in other CUs

CU PERFORMANCE METRICS

The main types of key performance indicators for CUs in 2024:

- implementation of key projects and processes
- quality and satisfaction with training
- effectiveness of training planning (training plan and budget)

Key performance indicators for CUs in 2024:

TRAINING AND DEVELOPMENT DIVISION OF THE PERSONNEL ADMINISTRATION AND DEVELOPMENT DEPARTMENT OF THE HR AND ORGANIZATIONAL DEVELOPMENT DIRECTORATE OF KAZAKHMYS 3/4

DATA BASED ON THE RESULTS OF 2024

TARGET AUDIENCE

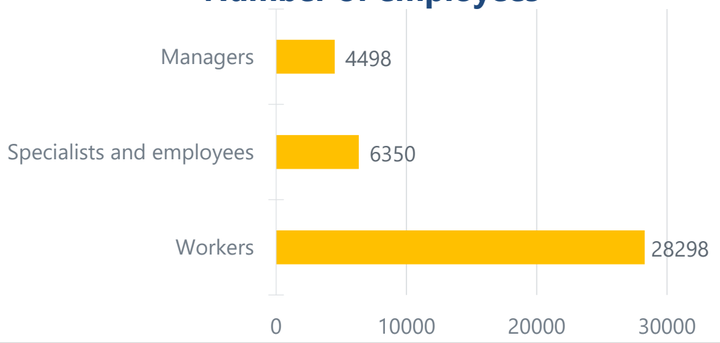
124 thousand pers., trained through the department

3.1 training coefficient per employee (number of trainings/ number of employees)

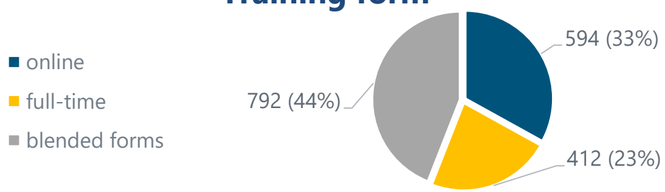
100% of the trainings were conducted in 2024

80% average update rate in 2024 for courses and programs developed in 2023.

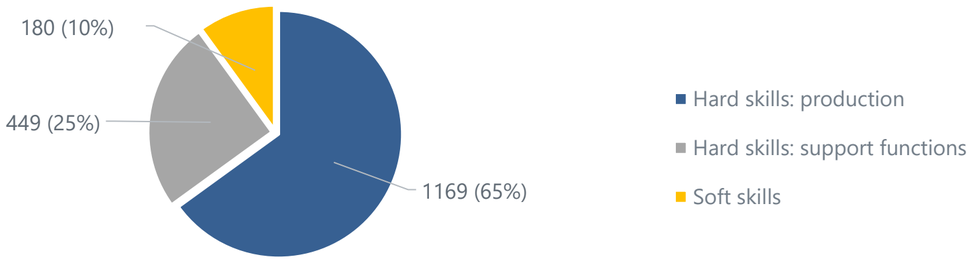
Number of employees



Training form

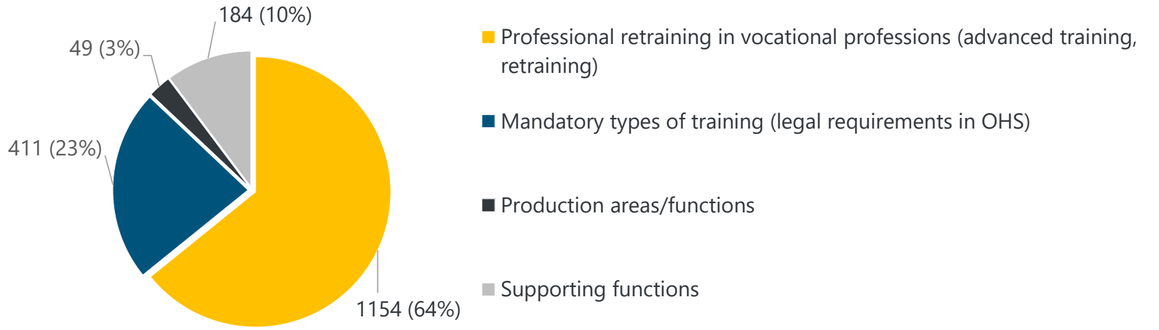


Share of courses and programs by development directions



PORTFOLIO OF COURSES AND PROGRAMS

1,798 - total portfolio of CU courses and programs



CU tools for designing a portfolio of courses and programs, determining the need for corporate training

- company strategy analysis
- interviews with top management
- interviews/focus groups/surveys

Top 3 training topics in 2024

Soft skills
- Analytics and competence building
- Succession and talent management
- Emotional intelligence

Hard skills: production
- Mining
- Mineral processing
- Metallurgy

Hard skills: support functions
- GOST ISO/IEC
- CISCO
- Maintenance and repair training of repair personnel

TRAINING AND DEVELOPMENT DIVISION OF THE PERSONNEL ADMINISTRATION AND DEVELOPMENT DEPARTMENT OF THE HR AND ORGANIZATIONAL DEVELOPMENT DIRECTORATE OF KAZAKHMYS 4/4

DATA BASED ON THE RESULTS OF 2024

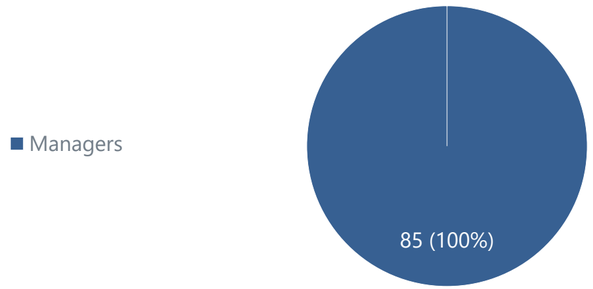
The main scope of work on preserving and transferring experience and knowledge that contributes to the recruitment, successful adaptation, and development of young professionals is aimed at maintaining the mentoring system in the company.

~9,000

of employees of various categories participate in the system of transfer of experience and knowledge, the development of others

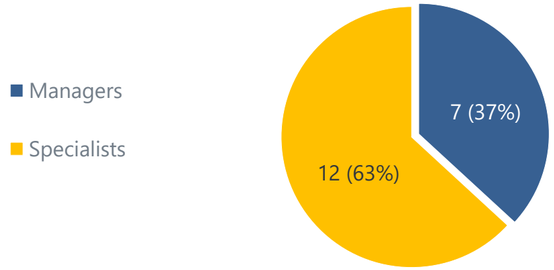
SPEAKERS, 85 pers.

Share of employees participating as speakers in educational and corporate events, %



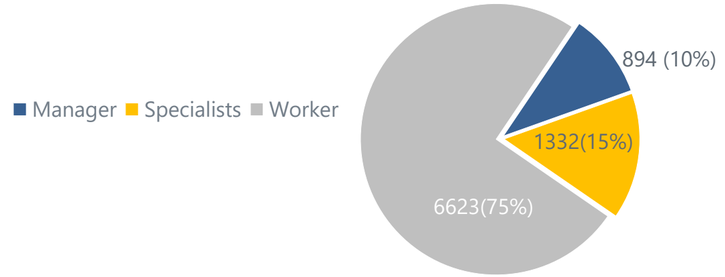
INTERNAL COACHES, 19 pers.

Share of staff involved in the delivery of courses and programs, %



MENTORS, 8,849 pers.

Share of employees participating as mentors in in-house training, %



QARMET CORPORATE UNIVERSITY 1/4

DATA BASED ON THE RESULTS OF 2024

PROFILE

Year of foundation: 2015

Location of the CU Head Office: Temirtau city

Organizational and legal form: Training, Development and Recruitment Division of Qarmet JSC

Company website: https://qarmet.kz

Collective governing body of CU: the functions of Collective governing body of CU are implemented at the current stage through regular interaction with key functional and production units

Subordination of the Director of CU: to the Director for Personnel and Social Affairs

Clients: company employees, contractors, individuals: (55,563 pers.)

Budget for the training of Qarmet employees: KZT 342,539,000

Share of the training budget from total personnel costs: 0.04%

Budget for 1 employee: KZT 5,774

LEGITIMACY

Certificate for the right to carry out work in the field of industrial safety

EDUCATIONAL INFRASTRUCTURE

- Total area: 9,200 sq.m
- Number of training centers/locations: 2
- Number of classrooms: 59
- Online learning platform: Knowledge
- Number of studios/centers for digitizing courses and programs: none

AREAS OF TRAINING

1. Mandatory safety training
2. Vocational training for trade jobs
3. Executive programs
4. Personnel reserve development programs
5. Corporate programs for production and support functions

TYPES OF ACTIVITIES

1. Development of courses and programs
2. Digitization/production of online courses and programs
3. Services and organization of training
4. Organization of corporate events and team buildings
5. Research activities in the training and development (research on training needs, interviews, surveys for course and program design, and other)

EDUCATIONAL PARTNERSHIPS AND RECOGNITION

Karaganda Industrial University NJSC

Abylkas Saginov Karaganda Technical University NJSC

Karaganda State University named after Academician E. A. Buketov NJSC

QARMET CORPORATE UNIVERSITY 2/4
DATA BASED ON THE RESULTS OF 2024

PRINCIPLE OF ORGANIZATION OF CU UNITS

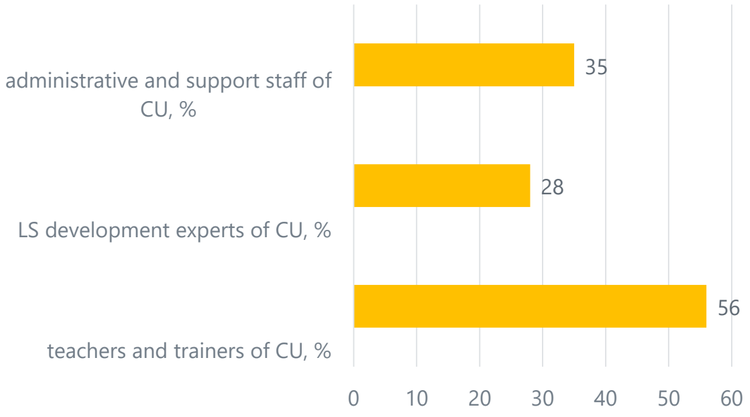
By areas of activity:

- development of educational solutions
- managing internal trainers
- regional infrastructure management (equipping training centers/locations, organizing and administering training)
- educational analytics and automation of training services

By areas of training:

- academies, faculties / areas of study

STRUCTURE AND TEAM



35 full-time employees

41 is average age

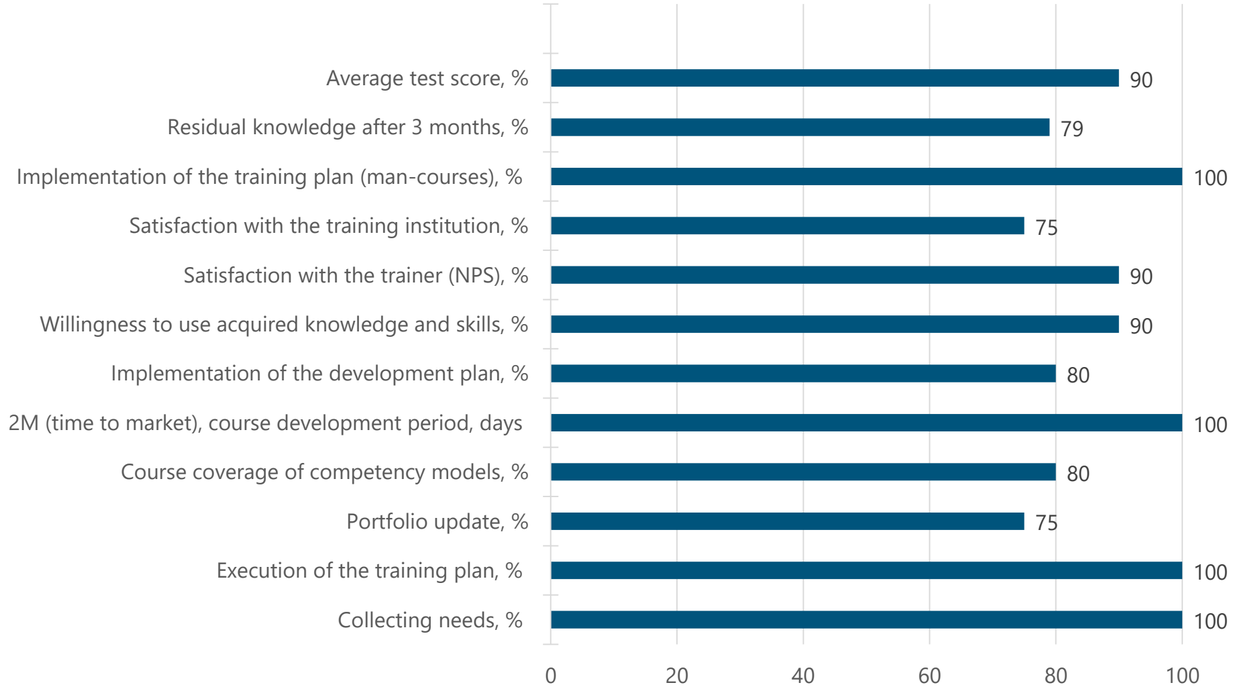
0% has work experience in other CUs

CU PERFORMANCE METRICS

The main types of key performance indicators for CUs in 2024:

- volume of training
- quality and satisfaction with training
- implementation of key projects and processes

Key performance indicators for CUs in 2024:



QARMET CORPORATE UNIVERSITY 3/4
DATA BASED ON THE RESULTS OF 2024

TARGET AUDIENCE

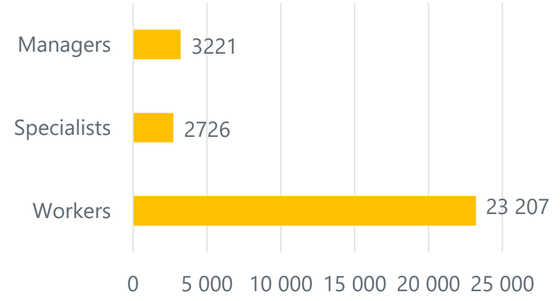
55.5 thousand
man-courses trained at the CU

1.9 training coefficient per employee (number of trainings/ number of employees)

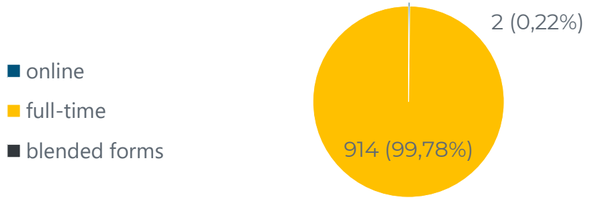
99% of the trainings were conducted by CU in 2024

25% average update rate in 2024 for programs developed in 2023.

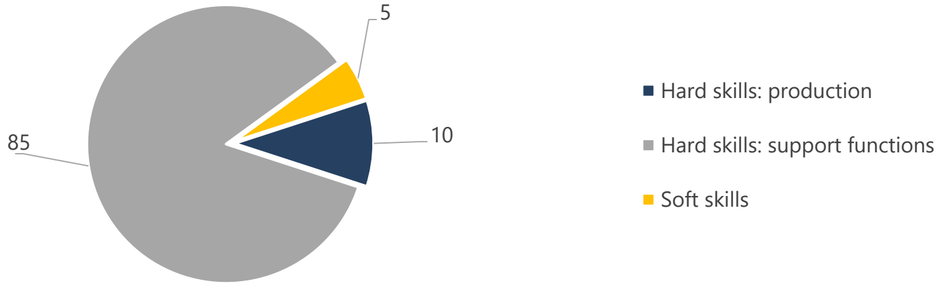
Number of employees



Training form

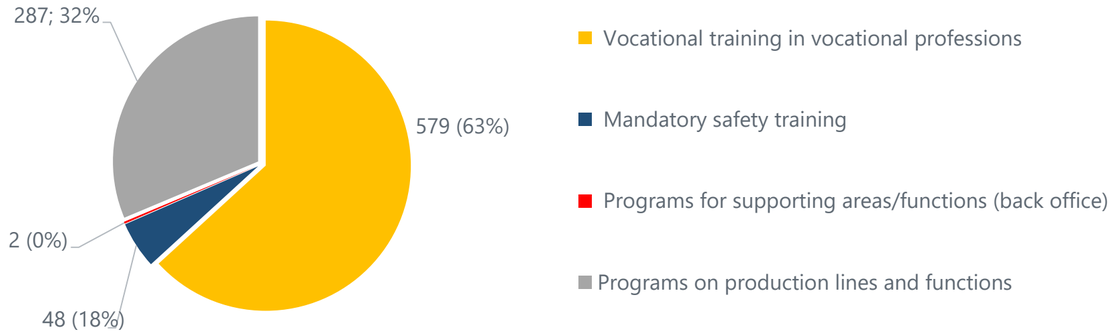


Share of courses and programs by development directions



PORTFOLIO OF COURSES AND PROGRAMS

916 - total portfolio of CU courses and programs



CU tools for designing a portfolio of courses and programs, determining the need for corporate training

- company strategy analysis
- interviews with top management
- interviews/focus groups/surveys
- analysis of global trends in corporate training
- analysis of benchmarks/best practices of other companies
- feedback from external and internal clients

Top 3 training topics in 2024

Soft skills
- Line Manager School
- Engineering Club
- Language Academy

Hard skills: production
Advanced training as part of vocational education:
- process personnel
- electrical service and automation personnel
- underground workers

Hard skills: support functions
- Special training for the company's repair services in the field of diagnostics
- Special training for the company's repair services in the field of repair organization
- Special training of employees on maintaining degassing documentation and gas emission management using a PC

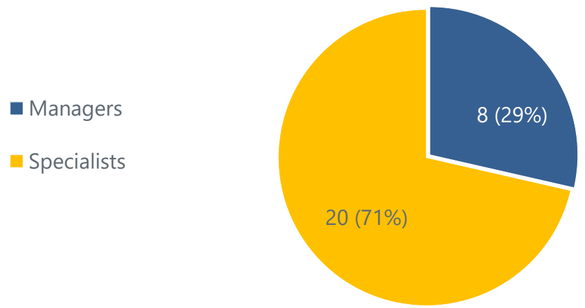
QARMET CORPORATE UNIVERSITY 4/4

DATA BASED ON THE RESULTS OF 2024

The core activity is the Leaders Teach Leaders program, which includes the Internal Trainer School and the Mentoring System. It contributes to the preservation and transfer of experience and knowledge, creating value and uniqueness for CU courses and programs. It also helps preserve the company's uniqueness, promote employee growth and development, create new opportunities for all occupations, accelerate adaptation, develop corporate culture, increase motivation, and boost productivity.

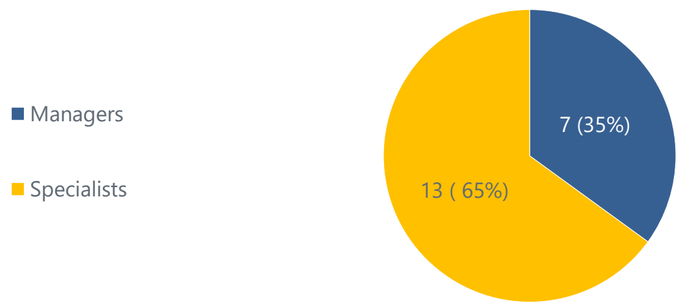
EXPERTS AND SPECIALISTS, 28 pers.

Share of staff involved in the development and maintenance of course and program delivery, %



SPEAKERS, 20 pers.

Share of employees participating as speakers in educational and corporate events, %

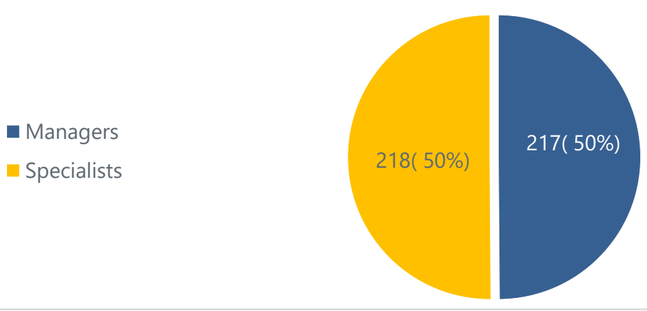


3,500+

of employees of various categories participate in the Leaders Teach Leaders system (transfer of experience and knowledge, development of others)

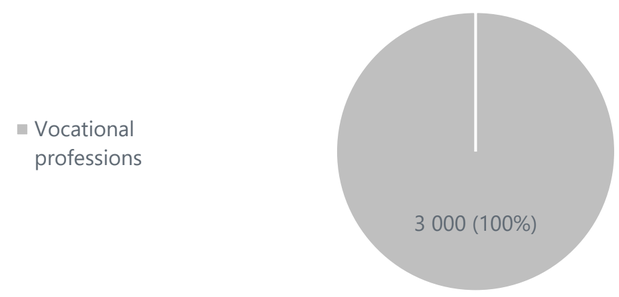
INTERNAL COACHES, 435 pers.

Share of staff involved in the delivery of courses and programs, %



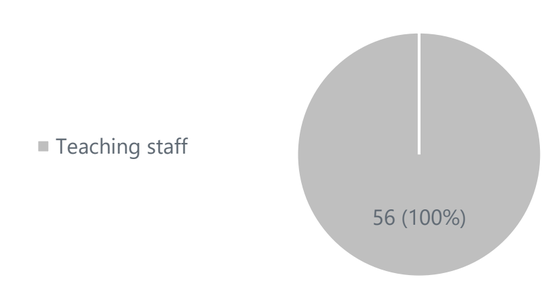
MENTORS, 3,000 pers.

Share of employees participating as mentors, %



CONTRACTED TEACHERS, 56 pers.

Share of contracted teachers participating in the courses, %



CORPORATE UNIVERSITY OF THE HUMAN RESOURCES DEPARTMENT OF KAZZINC 1/4

DATA BASED ON THE RESULTS OF 2024

PROFILE

Year of foundation: 2012

Location of CU: Ust-Kamenogorsk city

Organizational and legal form: CU as part of the Human Resources Department of Kazzink LLP

Company website: www.kazzinc.com

Collective governing body of CU: none

Subordination of the Director of CU: to the Head of the Human Resources Department

Clients: company employees (19,717 pers.)

KAZZINC staff training budget: KZT 3,596 million

The share of the training budget from total personnel costs: 1.8%

Budget for 1 employee: KZT 182,380

LEGITIMACY

Certificate for the right to carry out work in the field of industrial safety

EDUCATIONAL INFRASTRUCTURE

It is organized on the basis of the premises of its own training centers, partner providers, and rented premises:

- Total area: 6,298 sq.m
- Number of training centers/locations: 10
- Number of classrooms: 61
- Online learning platform: LMS (SAP Success Factors, E-Learning Server 5G)
- Number of studios/centers for digitizing courses and programs: 1

AREAS OF TRAINING

1. Mandatory safety training
2. Vocational training for trade jobs
3. Executive programs
4. Personnel reserve development programs
5. Corporate programs for production and support functions

TYPES OF ACTIVITIES

1. Development of courses and programs
2. Digitization of courses and programs
3. Training of internal trainers
4. Training organization
5. Administration of training
6. Organization of corporate events

EDUCATIONAL PARTNERSHIPS AND RECOGNITION

- Nazarbayev University AOE
- Daulet Serikbayev East Kazakhstan Technical University NJSC
- K.I. Satbayev KazNRTU NJSC
- Sarsen Amanzholov East Kazakhstan University NJSC

CORPORATE UNIVERSITY OF THE HUMAN RESOURCES DEPARTMENT OF KAZZINC 2/4

DATA BASED ON THE RESULTS OF 2024

PRINCIPLE OF ORGANIZATION OF CU UNITS

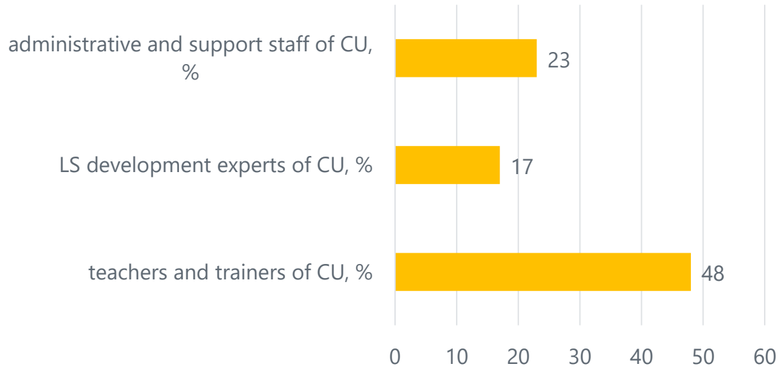
By areas of activity:

- Educational and Methodological Department (course and program development, training and support for internal trainers)
- Educational Institutions Cooperation Department (selection of students for corporate programs, adjustment of educational programs to the needs of enterprises, formation of an external personnel reserve)
- Curriculum Administration Department (E-learning, procurement and organization of training (external, internal), organization of training trips)
- Occupational Safety Department (courses and programs development, coordination of offices/departments in this area)
- Regional Departments (development of educational and methodological complexes for professions, conducting professional training, training in occupational safety, organization of internal and external training, budgeting)

By areas and types of training:

- Schools of management, departments in special areas

STRUCTURE AND TEAM



88 full-time employees

47 is average age

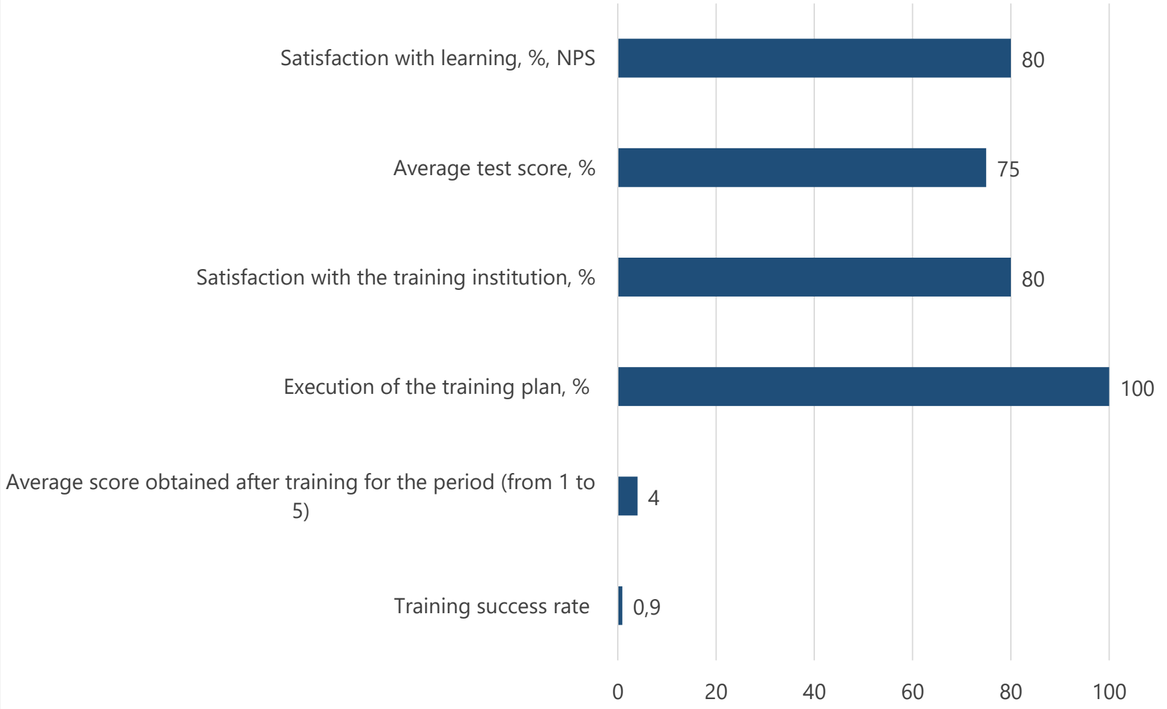
7.95 % has work experience in other CUs

CU PERFORMANCE METRICS

The main types of key performance indicators for CUs in 2024:

- implementation of key projects
- quality and satisfaction with training
- effectiveness of training planning (training plan and budget)

Key performance indicators for CUs in 2024:



CORPORATE UNIVERSITY OF THE HUMAN RESOURCES DEPARTMENT OF KAZZINC 3/4

DATA BASED ON THE RESULTS OF 2024

TARGET AUDIENCE

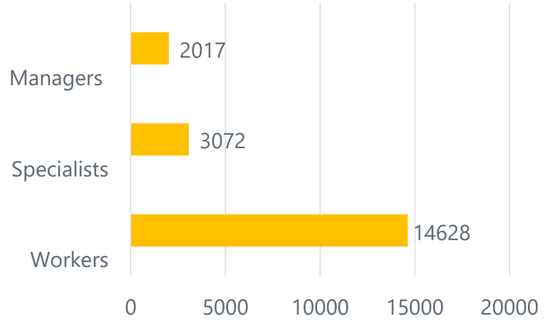
111,496
man-courses trained at CU

4.05 training coefficient per employee (number of trainings/ number of employees)

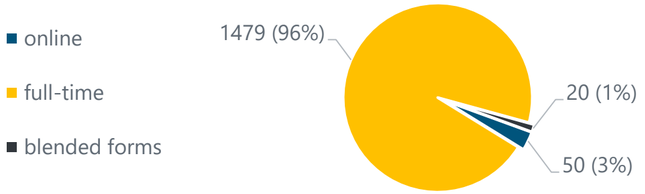
82% of the trainings were conducted by CU in 2024

7% average update rate in 2024 for programs developed in 2023.

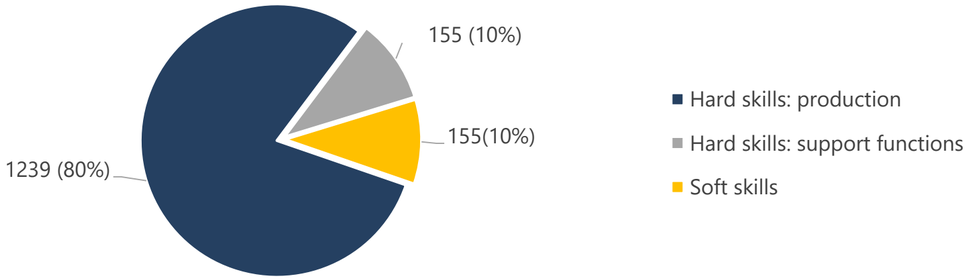
Number of employees



Training form

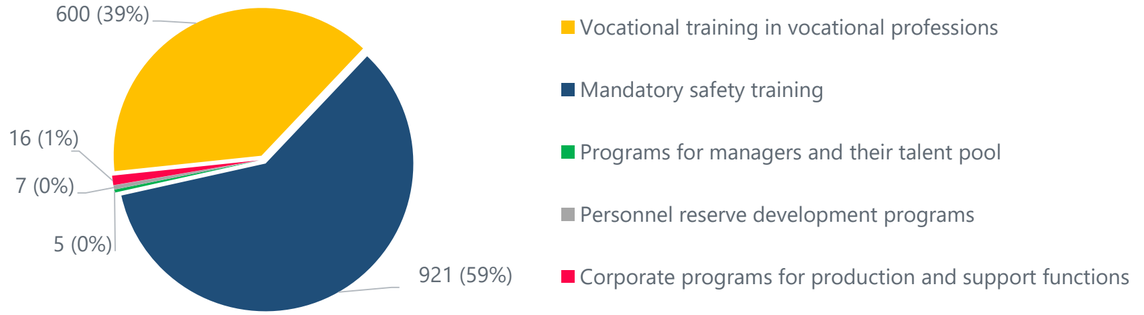


Share of courses and programs by development directions



PORTFOLIO OF COURSES AND PROGRAMS

1,549 - total portfolio of CU courses and programs



CU tools for designing a portfolio of courses and programs, determining the need for corporate training

- interviews with top management
- analysis of global trends in corporate training
- feedback from external and internal clients
- analysis of benchmarks/best practices of other companies

Top 3 training topics in 2024

Soft skills
- School of Masters
- Safe Work Leadership Program
- Language Club

Hard skills: production
- Mining
- Beneficiation and metallurgy
- Energy industry

Hard skills: support functions
- Programs of the Departments of the CU Schools of Management (fixed assets, energy, metallurgy, open-pit mining, personnel safety, etc.)
- Financial Unit of the School of Shop Managers
- School of Technical Inspectors

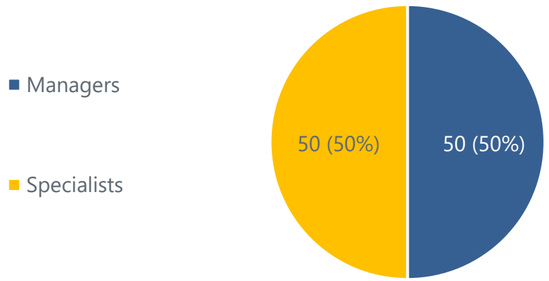
CORPORATE UNIVERSITY OF THE HUMAN RESOURCES DEPARTMENT OF KAZZINC 4/4

DATA BASED ON THE RESULTS OF 2024

The company operates several sustainable systems to ensure the transfer, preservation and development of experience and knowledge within the framework of courses and programs for management, certain production and support functions, production and mandatory training.

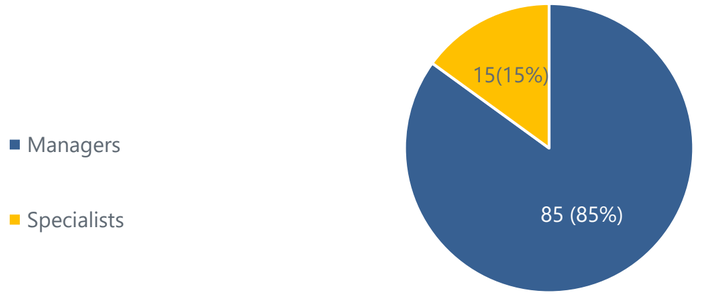
EXPERTS, 100 pers.

Share of staff involved in course and program development, %



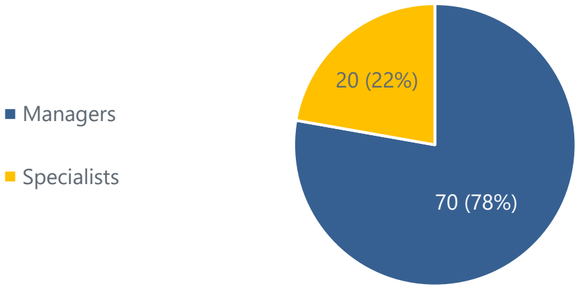
SPEAKERS, 100 pers.

Share of employees participating as speakers in educational and corporate events, %



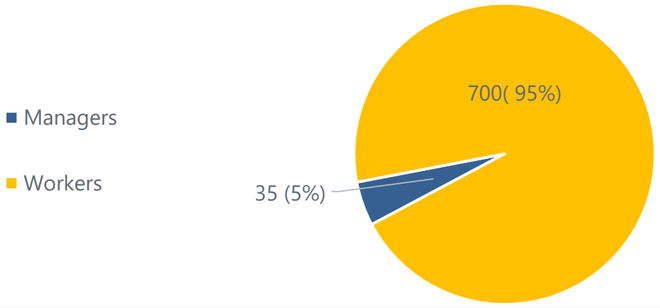
INTERNAL COACHES, 90 pers.

Share of staff involved in the delivery of courses and programs, %



MENTORS, 700+ pers.

Share of employees participating as mentors in in-house training, %



~1,000

of employees of various categories participate in the Leaders Teach Leaders system (transfer of experience and knowledge, development of others)

CORPORATE NUCLEAR UNIVERSITY OF KAZATOMPROM 1/4

DATA BASED ON THE RESULTS OF 2024

KAZATOMPROM

PROFILE

Year of foundation: 2004

Location of the CU Head Office: Almaty city

Organizational and legal form: Kazakhstan Nuclear University, the Branch of the Institute of High Technologies LLP

Company website: https://knu.kazatomprom.kz

Collective governing body of CU: none

Subordination of the Director of CU:
to the General Director of the Institute of High Technologies LLP

Clients: KAP employees (~20,000 pers.)

Budget for training: KZT 3.2 billion

The share of the training budget from total personnel costs: 1.72 %

Budget for 1 employee: KZT 189,000

LEGITIMACY

Certificate of training and retraining of specialists and employees in the field of industrial safety

License for special training of personnel responsible for ensuring nuclear and radiation safety

EDUCATIONAL INFRASTRUCTURE

- Total area: 177 sq.m
- Number of training centers/locations: 1
- Number of classrooms: 6
- Online learning platform: CUBA

AREAS OF TRAINING

1. Mandatory safety training
2. Vocational training for trade jobs
3. Executive programs
4. Personnel reserve development programs
5. Corporate programs for production and support functions

TYPES OF ACTIVITIES

1. Development of training programs
2. Training organization
3. Administration of training
4. Organization of corporate events
5. Research activities (analytics)

EDUCATIONAL PARTNERSHIPS AND RECOGNITION

SAMRUK BUSINESS ACADEMY — Samruk Business Academy Private Institution

KAZAKH BRITISH TECHNICAL UNIVERSITY — Kazakh-British Technical University JSC

ТОМСКИЙ ПОЛИТЕХНИЧЕСКИЙ УНИВЕРСИТЕТ — National Research Tomsk Polytechnic University, Federal State Budgetary Educational Institution of Higher Education

SATBAYEV UNIVERSITY — K.I. Satbayev KazNRTU NJSC

CORPORATE NUCLEAR UNIVERSITY OF KAZATOMPROM 2/4

DATA BASED ON THE RESULTS OF 2024

KAZATOMPROM

PRINCIPLE OF ORGANIZATION OF CU UNITS

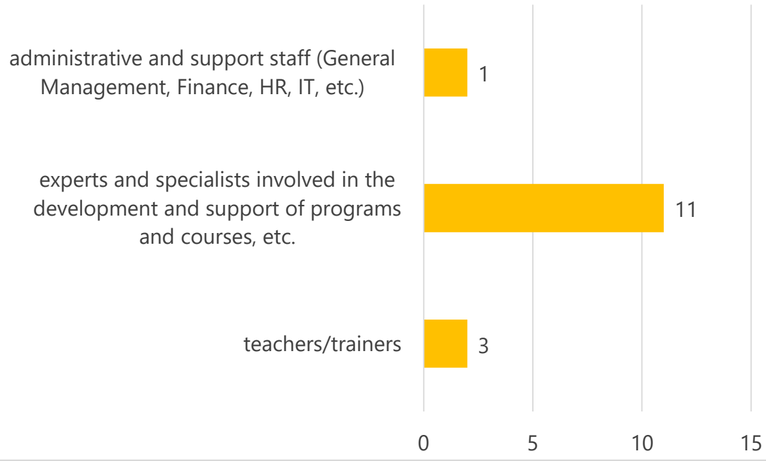
By areas of activity:

- development of educational solutions
- organization and administration of training
- educational analytics

By areas of training:

- mandatory
- specialized
- medium-term
- corporate

STRUCTURE AND TEAM



15 full-time employees

37 is average age

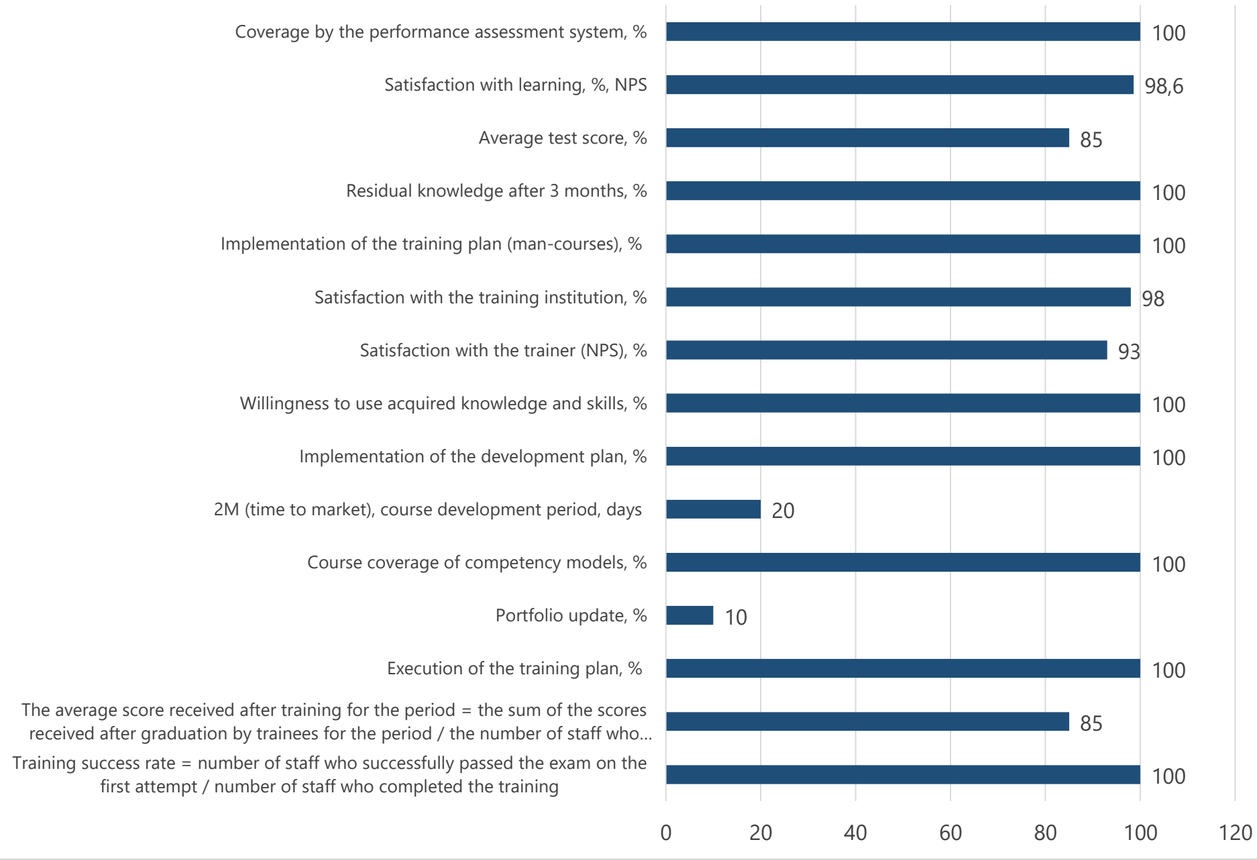
0% has work experience in other CUs

CU PERFORMANCE METRICS

The main types of key performance indicators for CUs in 2024:

- Execution of training plans and budgets
- Quality of training

Key performance indicators for CUs in 2024:



CORPORATE NUCLEAR UNIVERSITY OF KAZATOMPROM 3/4

DATA BASED ON THE RESULTS OF 2024

KAZATOMPROM

TARGET AUDIENCE

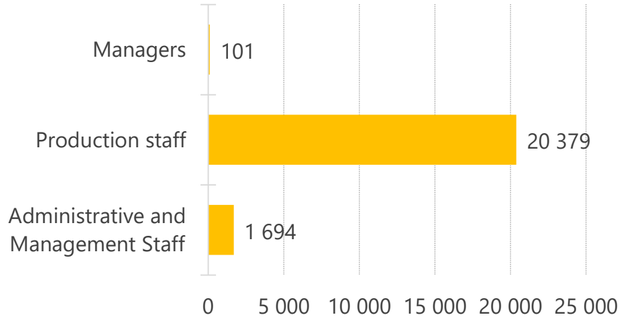
15,993 pers.
trained at CU

0.64 training coefficient per employee (number of trainings/ number of employees)

15% of the trainings were conducted by CU in 2024

20% average update rate in 2024 for programs developed in 2023.

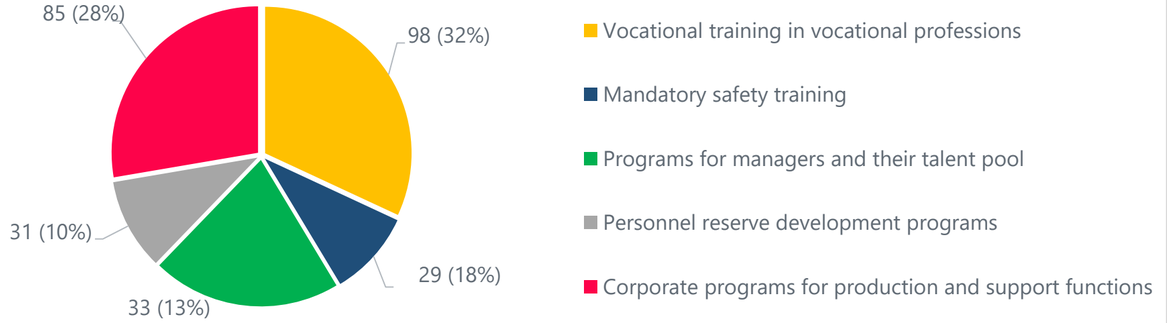
Number of employees



Training form: online/offline

PORTFOLIO OF COURSES AND PROGRAMS

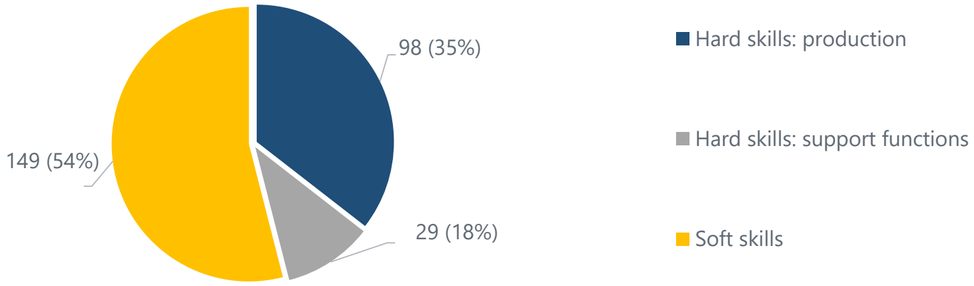
276 - total portfolio of courses and programs



CU tools for designing a portfolio of programs, determining the need for corporate training

- company strategy analysis
- interviews with top management
- interviews/focus groups/surveys
- analysis of global trends in corporate training
- feedback from internal clients

Share of educational solutions in development areas



Top 3 training topics in 2024

Soft skills
- CEO Club
- Development of personal competencies

Hard skills: support functions
- Training according to ISO requirements
- Radiation safety
- Industrial safety

Hard skills: production
- Geotechnology, uranium mining by in-situ leaching
- Chemical technology of uranium processing

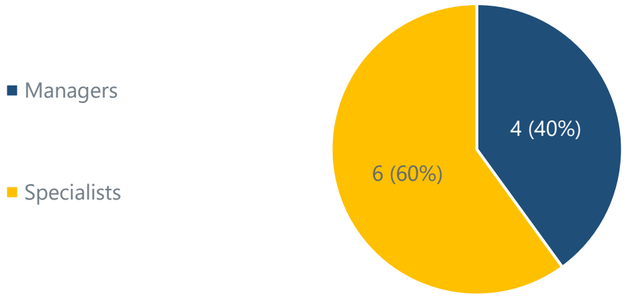
CORPORATE NUCLEAR UNIVERSITY OF KAZATOMPROM 4/4

DATA BASED ON THE RESULTS OF 2024

KAZATOMPROM

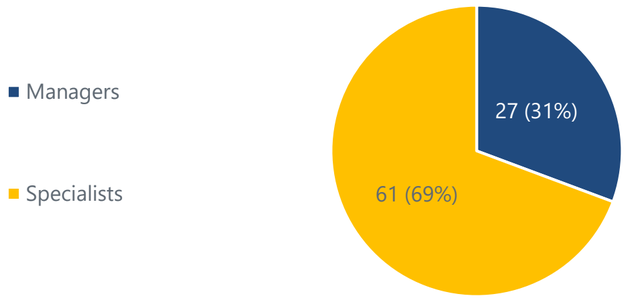
Involvement of managers and employees in the transfer of experience and knowledge, as well as in training processes

EXPERTS, 10 pers.



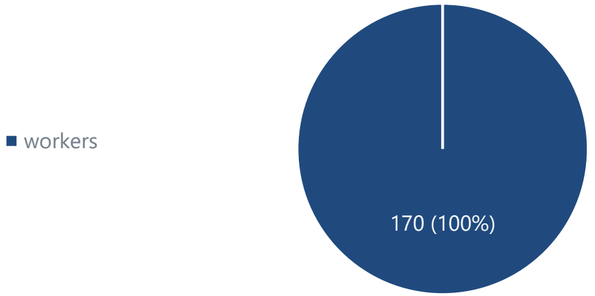
INTERNAL COACHES, 88 pers.

Share of employees involved in educational solutions, %



MENTORS, 170 pers.

Share of employees participating as mentors, %



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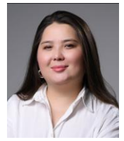

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LINKS TO ADDITIONAL SOURCES

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Eurasian Resources Group
Corporate University

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Data was also used from open sources of the Internet news websites like Eurostat, Society for Human Resource Management, Association for Talent Development, LinkedIn Learning, McKinsey & Company, PwC, Gallup, Deloitte, etc.