



From university to labour market in the 21st century:

a step forward in work-based placements

UniLab

National Report for **Russia**

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The report is written by the project team of Siberian Federal University (P5). It summarizes the results of the study carried out together with three other Russian project partners - Lomonosov Moscow State University, Almet'yevsk State Oil Institute, and Orenburg State University. We appreciate all the support, feedback and the information provided by the partners and companies through online communication and inquiry returns.

The EUCEN's project team (P1) were exceptionally helpful and supportive at all stages in the development of the report.

LIST OF ACRONYMS

SibFU	Siberian Federal University
LMSU	Lomonosov Moscow State University
ASOI	Almetyevsk State Oil Institute
OSU	Orenburg State University
EUCEN	European University Continuing Education Network
HEI	Higher Education Institution
UniLab	“From University to Labour Market in the 21st Century: A Step Forward in Work-based Placements”, the ERASMUS+ project

OBJECTIVES

The UniLab primary goal

The project is aimed at developing an innovative model of cooperation between universities and enterprises to promote effective practical training leading to decent employment opportunities of graduates.

The UniLab model key element

The main component of this model is practical training.

The objective of the study is to reveal how university-business collaboration is carried out in Russia in terms of work-based learning (WBL) opportunities created for students.

Goals of the baseline study:

- to understand the specificity in organization of practical training under several parameters, in particular the content and nature of the activities carried out during practical training by the students;
- to identify the relationship between the current state of the organization of practical training and the employment prospects of the graduates;
- to evaluate students' awareness level and their readiness for effective training and employment.

The results of the study will contribute to better understanding of the current situation and will help in developing a model of WBL for Russian Higher Education Institutions (HEIs).

METHODOLOGY

This study is based on the results of the data received from the desk research, case studies of the Russian partner universities, and an extensive survey conducted among employers. Triangulation of the data sources assured the reliability. The analysis of the collected data led to a big picture of how WBL is provided in the country and to understanding the collaboration “business-university” level when it comes to student internships.

Baseline study **hypotheses**:

- The current state of practical training in enterprises does not fully meet the needs for training modern employees.
- The training level or readiness level of graduates does not fully meet the requirements of today's employers.

Desk Research

The main legal documents/regulations pertaining the WBL and representing the public policy on WBL were analysed.

Case Studies

Four RU UniLab partner universities - SibFU, LMSU, ASOI and OSU – were briefly introduced. The model regulations on the organization of practical training in Russian universities were described.

Survey

The SibFU project team developed the UniLab questionnaire (Google forms) and shared it with other UniLab partner universities. The project teams conducted the survey in more than 100 companies in the Russian Federation. The companies surveyed represented major sectors of the Russian economy by their fields of their activity, which were related to the majors of university education. Table 2 and Figures 1&2 show that sampling is sufficiently representative in terms of industry representation and company size. The data received are considered to be valid and resultant.

EXECUTIVE SUMMARY

Practical training serves as an effective tool for adapting young professionals to the labor market, as it creates opportunities to develop additional competencies, including in the field of job search. Practical training can also be considered as one of the channels for job search by fresh graduates, since companies can make job offers based on the work-based practical training results.

Student practical training is an integral part of the students' curriculum, and each student must undertake work-based practical training according to the educational schedule.

The organization of practical training in Russian universities is regulated by the **Federal Law on Education in the Russian Federation No. 273 dated 29.12.2012**, and by intra-university regulations on the organization of practical training.

Despite the well-defined regulatory framework, the research revealed a number of problems in practical training implementation:

1. Insufficient communication between various university structures, such as departments, career centers, etc., involved in the process of organizing students' practical training;
2. Insufficient interaction between universities and companies;
3. Poor involvement of students in business projects and creative activities during practical training;
4. Lack of innovative approaches to student assessment.

Potential solutions to the problems could include:

- creation of working groups from representatives of core businesses and university departments in order to jointly develop or make changes to the practical training programmes, both in terms of their content and organizational aspects;
- building mechanisms for interaction between university practice supervisors and company mentors;
- better involvement of students and, probably, university practice supervisors in business projects, creative work within the framework of practical training;
- introduction of innovative approaches to student assessment, correlated with the methods of evaluating candidates for vacancies in particular companies as an element of practical training.

INTRODUCTION

Higher education in Russia has undergone many changes over the past decades, due to the requirements of the economy, the emergence of new digital educational technologies, and the transition to a two-level training system. The changes affected the structure and content of educational programs, teaching methods, and approaches to managing educational institutions and programs.

Experts identify a number of significant problems in the field of the higher education system related to the low real impact of the formally high level of education of the nation on economic growth and its sustainability. According to the Global Human Capital 2017 report, issued by the World Economic Forum in September 2017, Russia ranks very high in 4th place in the world in terms of the volume of human capital (measured mainly through indicators of population coverage at different levels of formal education), but only 42nd in terms of the actual use of skills in the workplace and inclusion in continuing education.

On one hand, higher education in Russia has become massive (a global trend), which is typical for the transition to a post-industrial information society and to a knowledge society, when the differences between the creation and use of high-tech and direct scholarly knowledge are becoming rather relative. On the other hand, this trend is accompanied by functional unemployment.

Over the past decades, large-scale transformation processes have been implemented in Russian education, both due to general changes in the national education system, and the transition from command-and-control to market principles of economic regulation, as well as the emergence of the phenomenon of entrepreneurship. However, these changes lag behind the needs of the market, which requires modification of the basic principles and specific training practices. The central inadequacy of today's student education consists in that the acquired competencies do not fully meet the needs of the labor market.

Employers, students, HEIs and the state have their specific interests and give their assessment of the quality of education. From the position of the state, the quality of education should be sufficient for the implementation of the development strategy chosen by the society. Educational institutions support the point of view of the state and assess the quality of education in terms of compliance of the content and level of training with the requirements formulated in the form of Federal State Educational Standards. Graduates consider education a quality one if it allows them to successfully compete in the labor market, get a decent job and successfully develop a career. Finally, when employing fresh graduates to work, employers are primarily interested not in the compliance of their training with the requirements of the educational standards, but in

their professional competences, their ability to navigate the work environment, solve non-standard tasks, make independent decisions within their competences, be responsible, work in a team.

In many regions of Russia, the "university-enterprise-region" scheme, which might allow both improving the quality of professional training of graduates and providing the region's enterprises with highly qualified personnel, does not work effectively enough. Russian universities have largely focused their activities on serving the educational needs of the population, rather than adapting to the changed demands from employers.

In these conditions, the potential of all types of practical training is significantly increasing: it should be aimed at ensuring the building of practical skills of future graduates, strengthening the theoretical knowledge obtained during their university studies, forming the ability to apply them to solve specific problems, and developing professionally significant qualities.

Meanwhile, the level of organization of practical training by host parties – enterprises, companies, etc., is often not sufficient for students to gain real work experience. The reason for this lies in the fact that relations between universities and employers by and large remain formal.

LEGAL FRAMEWORK OF PRACTICAL TRAINING IN RUSSIA

Order No. 885/390 of the Ministry of Science and Higher Education of the Russian Federation and the Ministry of Education of the Russian Federation dated 05.08.2020 approved the ***Regulations on Student Practical Training and the Model Form of the Agreement on Student Practical Training*** between an organization engaged in educational activities and an organization engaged in activities related to the profile of the corresponding educational program.

The *Regulations on Student Practical Training* establish the procedure for organizing practical training of students (hereinafter – practical training).

Practical training is a form of organization of educational activities within curriculum under the terms of performing certain types of work related to future professional activities and aimed at the formation and development of practical skills and competencies in the profile of the corresponding educational programme¹.

Practical training can be provided²:

1. directly in the organization that carries out educational activities (hereinafter referred to as the *educational organization*), including in the structural division of the educational organization intended for practical training;
2. in an organization that carries out activities in the profile of the relevant educational programme (hereinafter referred to as the *profile organization*), including in a structural division of the profile organization intended for practical training, on the basis of an Agreement signed between the *educational organization* and the *profile organization*.

Practical training is organized by direct performing certain types of work related to students' future professional activities.

Types of training practice and methods of its implementation are determined by the educational programme developed in accordance with the Federal State Educational Standards or Educational Standards approved by an educational organization of higher education independently in accordance with It.10 of Art. 11 of Federal law No. 273 dated 29.12.2012 "On Education in the Russian Federation"³.

When organizing practical training, *profile organizations* create conditions for the implementation of components of the educational program, provide equipment and technical means of training to the extent that allows students to perform certain types of work related to their future professional activities.

¹ It. 24, Art. 2 of Federal Law No. 273 dated 29.12 2012 "On Education in the Russian Federation": Collection of legislation of the Russian Federation, 2012, No. 53, Art. 7598; 2019, No. 49, Art. 6962.

² It. 7, Art. 13 of Federal Law No. 273 dated 29.12 2012 "On Education in the Russian Federation": Collection of legislation of the Russian Federation, 2012, No. 53, Art. 7598; 2019, No. 49, Art. 6962.

³ Collection of legislation of the Russian Federation, 2012, No. 53, Art. 7598; 2019, No. 49, Art. 6962

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Subject to availability of a vacant position in a *profile organizations* or *educational organization* (when organizing practical training in an *educational organization*), where duties meet the requirements for practical training, a fixed-term employment contract on vacancy filling may be concluded with the student.

CASE STUDIES

Siberian Federal University (P5) is a higher education institution located in Krasnoyarsk, the first Federal University in Russia, a major research and educational center as well as the largest University in the Eastern part of Russia. It was founded in 2006 by combining five higher educational institutions in Krasnoyarsk.

Currently, SibFU unites 36 research and innovation divisions, including research institutes, design bureaus, technology parks, laboratories, equipment sharing centers, research and education centers, innovation centers, technology transfer centers, and pilot plants. In 2020, the University employed more than 8,000 faculty and staff.

Lomonosov Moscow State University (P6) is the top classical university in Russia, the center of Russian science and culture. 40 faculties are open to LMSU students, where they receive education in all the main classical areas. The most popular and, as a result, difficult to access are Faculties of Law and Economics. Training is conducted on integrated six-year programmes. MSU has 7 branches, as well as the Joint University with China in Shenzhen.

Almetyevsk State Oil Institute (P7) provides training on eight bachelor's degree programs, five master's degree programs, and postgraduate studies. The Institute also provides additional professional training services: professional development and continuing education. More than 2,700 undergraduates and postgraduates' study at AGNI.

Orenburg State University (P8) includes 18 faculties and institutes, more than 20,000 students, and about 1,000 faculty and staff. The University offers bachelor's, master's, specialist and postgraduate programmes.

Students have practical training at the enterprises of the city and region. Interestingly, the staff can also upgrade their skills there. The University also has close ties with many world universities.

Table 1. Russian project partners: educational diversity

Partner	Number of students	Field of education
Lomonosov Moscow State University - LMSU	40,000 students	more than 150 majors
Siberian Federal University - SibFU	30,000 students	more than 100 majors
Orenburg State University - OSU	20,000 students	more than 100 majors
Almetyevsk State Oil Institute - ASOI	2,000 students	more than 20 majors

Each partner university has adopted *Regulations on the student work-based practical placement*, which institutionalize the procedure for organizing and conducting practical training, its types and formats, methods for its implementation by the public educational institution.

The *Programme of the student work-based practical placement* includes:

- the indication of the type, format of practical training, and method for its implementation;
- listing of the planned learning outcomes, correlated with the planned results of the educational programme;
- indication of the place for practical training in the structure of the educational programme;
- estimation of the value of practice in terms of credits and its duration in weeks/hours;
- description of the content of the practical training;
- specification of the student reporting scheme;
- listing of the references;
- listing of the information technologies/ digital tools used during the practical training;
- description of the physical facilities and equipment used during the practical training;
- indication of assessment tools for student intermediate assessment.

The university sets the type and format of student practical training, as well as the method(s) for its implementation, in accordance with the Federal Educational Standard.

The terms of the student practical training are set in accordance with the *Programme of the student work-based practical placement*, the curriculum, and the academic calendar approved for the current academic year.

The organization and provision of the student work-based practical placement is supervised by the university department, which is responsible for signing the agreements on university-business cooperation and other documents related to student practical training.

The overall management of the student work-based practical placement is the responsibility of two appointed supervisors: one from the faculty of the *educational organization* and the other from the staff of the *profile organization*.

The results of the internship are evaluated on the basis of the assessment tools for student intermediate assessment within a ten-day period after the completion of the practical placement, according to the schedule of the educational process.

The student reporting includes:

- individual task(s) for practical training;
- work schedule (plan) for practical training;
- *Student Practice Diary* signed by the supervisor of the *profile organization*;
- *Report* on the specific work performed by the student during the practical training;
- other documents in accordance with the programme requirements.

NEEDS ASSESSMENT SURVEY

To conduct the study, a questionnaire was developed and an online survey was carried out in more than 100 companies.

Table 2. Size of the surveyed companies

University	Companies surveyed, number	Large company (over 250 people), %	Medium-sized company (100-250 people), %	Small company (up to 100 people), %
Lomonosov Moscow State University	24	72	28	-
Siberian Federal University	26	46	17	37
Orenburg State University	27	55	15	30
Almetyevsk State Oil Institute	21	98	2	-

Most respondents - from 46% to 98% - are large enterprises.

The companies surveyed represent the major sectors of the Russian economy by their fields of their activity, which are related to the fields of university education. Table 2 and Figures 1&2 show that the sampling is sufficiently representative in terms of industry representation and company size.

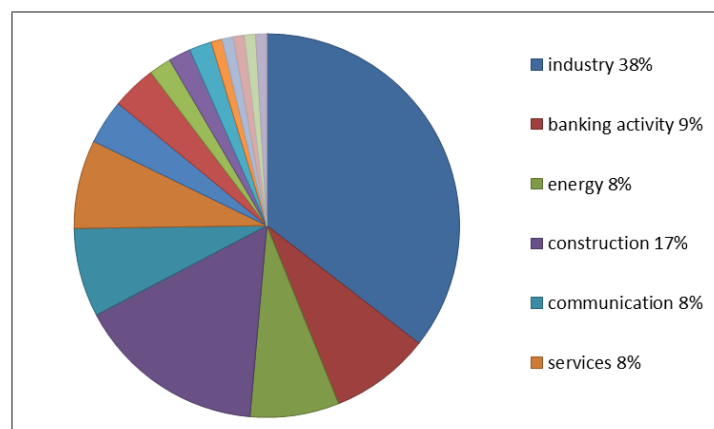


Figure 1. Respondents by industry: SibFU

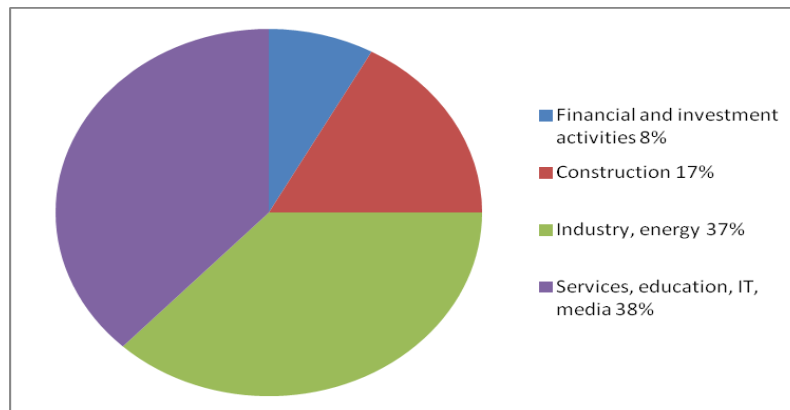


Figure 2. Respondents by industry: OSU

The responses to the questionnaire were grouped into four packages for analysis.

PACKAGE 1: THE ORGANIZATION AND PROVISION OF PRACTICAL TRAINING - FORMS AND METHODS

The first package focuses on the analysis of forms of cooperation between enterprises and educational institutions, and the process of organizing practical training in companies.

The vast majority of respondents confirmed good cooperation with regional universities. Figure 3 below shows ten forms of business–*university* cooperation.

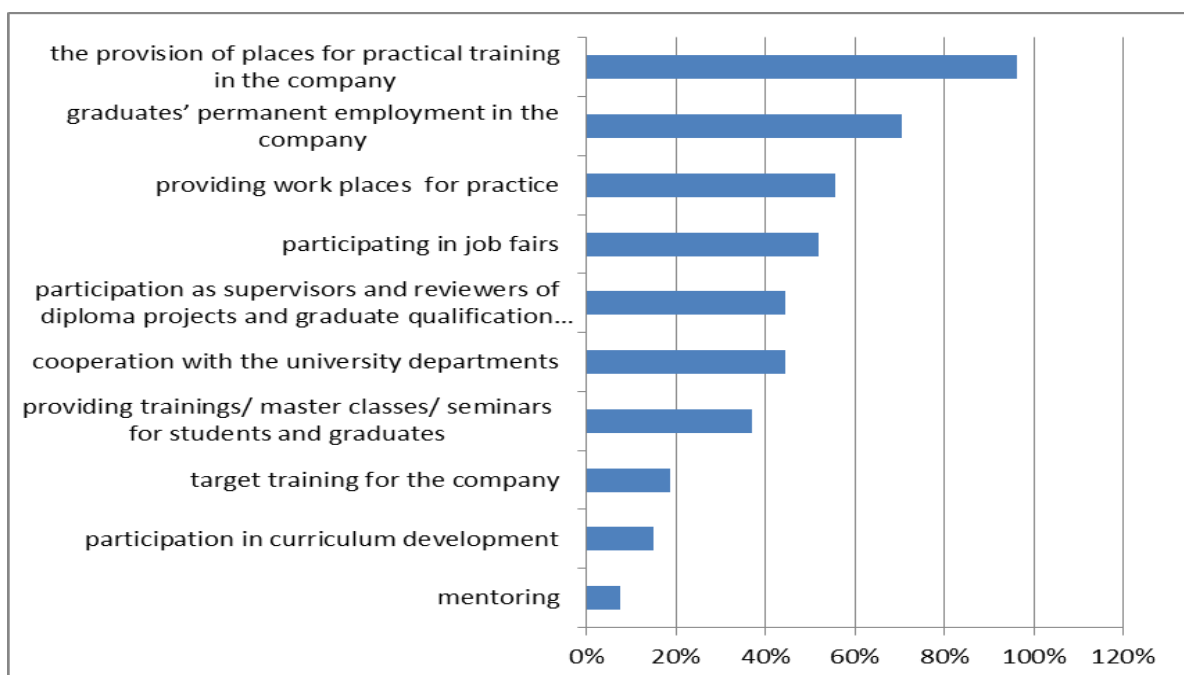


Figure 3. Business – university: forms of cooperation

Interesting findings:

- More than 90 % of companies guarantee provision of places for practical training;
- About 70% of the respondents justify the graduates' permanent employment in the company;
- High praise was given to the following forms of cooperation: job fairs; acting as supervisors and reviewers of diploma projects and graduate qualification papers; providing trainings/ master classes/ seminars for students and graduates;
- Direct correlation between the size of the company and the forms of cooperation: the larger the company is, the wider range of forms of cooperation it provides.

A number of the survey questions were related to practical training organization.

Q. Who is responsible for practical training in your company?

Interesting findings:

- Most respondents note that individual experts/ mentors are responsible for working with students, and only one fifth indicate availability of a separate company unit, mainly Human Resources departments.
- Half of the respondents believe that the company's specialists responsible for the practice do not need additional training to work with students, since the specialists are already competent enough. On the other hand, 33% of respondents state that student practical training is not very important for them. At the same time, it should be noted that a certain number of companies point out that their mentors (or would-be mentors) need special training to acquire basics of mentoring and human resource management, or at least some consultations on the specifics of working with students.

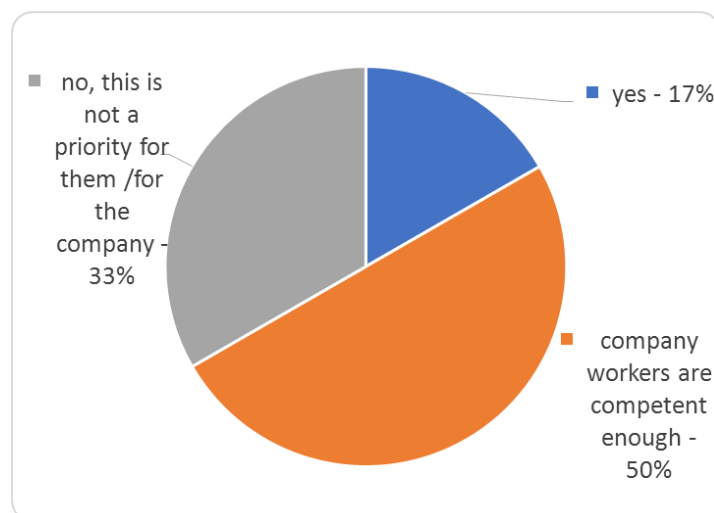


Figure 4. Need for training

- Most companies have some kind of regulatory framework for practical training provision, including *Guidelines for practice; Provisions on the access to information; Orders on the appointment* of the supervisor, or all of the above.
- Most companies register students for practice on the basis of the contracts (agreements) with the university. There is no direct connection between the regulatory framework and the method of registration.
- Regardless of the size of the company, the main students' responsibilities (functions) during practical placement are observation, performance of current operations as an assistant, technical and analytical paper work, etc. (Table 3).

Table 3. Types of students' responsibilities/ functions during practical training (several options can be marked), %

Functions	LMSU	SibFU	OSU	ASOI
Observation	39	63	67	65
Paper work (copying, records arrangement, etc)	39	54	63	67
Analytics	44	45	51	49
Involvement in the production processes	22	37	33	40
Participation in the project(s)	78	50	29	35
Promotion of the company's products/ services	56	3	18	0
Performance of current operations (as an assistant)	50	63	63	55
Creative work	33	38	26	28
Participation in planning and strategic processes	33	0	4	3

- The opportunity for students to participate in production is provided mainly by large organizations.
- Only large companies pay for students' practical training in full. The majority of respondents do not do it.

PACKAGE 2: ASSESSMENT OF STUDENTS' READINESS

Interesting findings:

- Most respondents highly appreciate the level of students' theory knowledge, the ability to acquire new knowledge and skills, and work in a team.

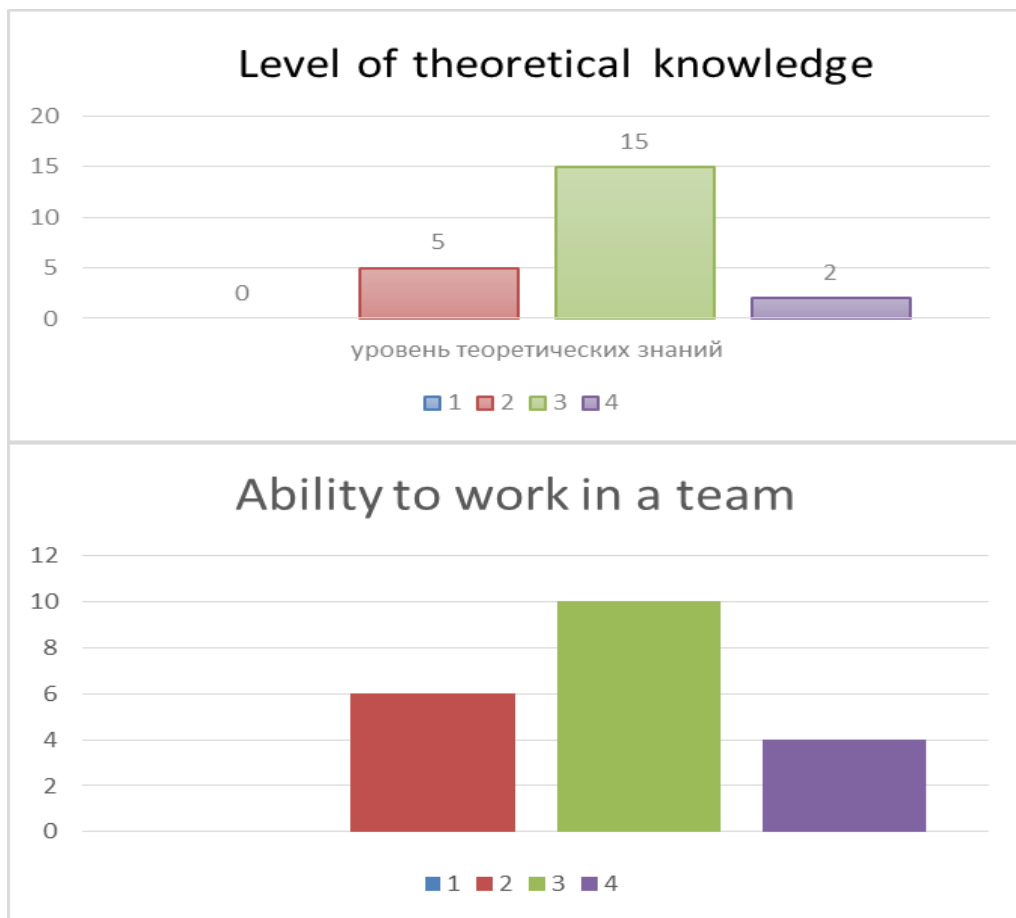


Figure 5. High rates: theory knowledge and team work

- The ability to apply skills to a specific situation is rated below average.

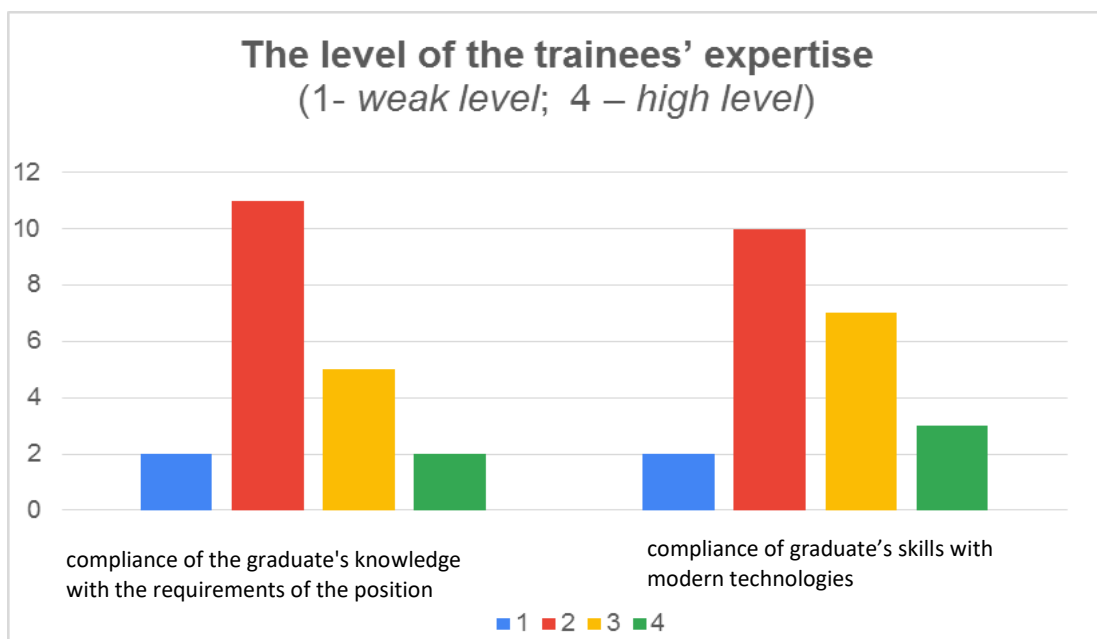


Figure 6. Low rates of trainees' expertise

- A rather low rate was obtained for compliance of the graduate's knowledge with the requirements of the position and compliance of the graduate's skills with modern technologies.

Table 4. Main students' weaknesses during practical training (four options) (%)

Main weaknesses	LMSU	SibFU	OSU	ASOI
Low level of theoretical knowledge	39	9	11	27
Insufficient level of practical skills	72	73	73	74
Lack of desire to work	67	23	26	24
Low discipline	39	32	4	12
Lack of desire for self-education and self-development	56	32	15	17
Low level of general professional training	39	23	23	32
Low learning ability	5	0	0	4
Special motivation required	61	41	31	36
Distorted views (expectations) about the company structure, hierarchy, functions performed	44	50	34	37

Interesting findings:

- insufficient level of practical ability (more than 70% in each institution)
- lack of desire to work (23-67%);

- distorted views (expectations) about the company structure, hierarchy, and functions performed (34-50%);
- low motivation (31-61%)

PACKAGE 3: ANALYSIS OF THE PRACTICAL TRAINING PROCESS

Among the methods used by companies to prepare students for performing functions some traditional approaches of mentoring, safety-awareness briefing, access to documents and consultancy were indicated. Comparatively new forms of work with students such as special trainings, inclusion in working groups do not often occur.

Table 5. Company methods for training students to perform tasks (three options), %

Method	LMSU	SibFU	OSU	ASOI
Consultancy	78	61	67	71
Mentoring	83	95	78	82
Access to documents	61	44	67	52
Safety-awareness briefing	50	74	59	58
Inclusion in working groups	56	35	22	32
Special trainings	28	4	11	6

Evaluation of the trainees' skills and activities was also regarded as a method of working with students during practical training (see Table 6).

Table 6. Q: Does the company evaluate skills and activities of the trainee? %

Method	LMSU	SibFU	OSU	ASOI
Yes / how is it made out?				
- Personal information file is written in the diary	22	48	56	64
- Personal information file to the university is given	56	17	33	26
- 360-degree approach is applied	6	4	4	8
- informal / oral feedback is given	44	34	26	20
No, evaluation is not carried out	11	21	11	0

Interesting findings:

- Most companies choose formal approaches to evaluate students' performance and skills, such as *Personal information file* written in the diaries and/or *Personal information file* sent to the university. More modern or in-depth assessment methods are not applied in practice.

Special attention was paid to the question about interaction between the company and educational institution (question 18).

Table 7. Q: Who does your organization interact with in the educational institution with which you cooperate? %

Answer	LMSU	SibFU	OSU	ASOI
With career center	72	33	52	11
With directors of the institutes /units	22	38	30	33
With university departments	83	54	78	69
With individual educators	44	38	41	25
Personal contacts (formal and informal)	44	46	19	17

Interesting findings:

- Interaction goes mostly on the level of “company - university departments (chairs)”. A small number of respondents work with career centers and the institute directors. A share of personal contacts between companies and the faculty is also high.
- Respondents ' estimates for different institutions differ significantly (Fig.5 vs Fig.8).

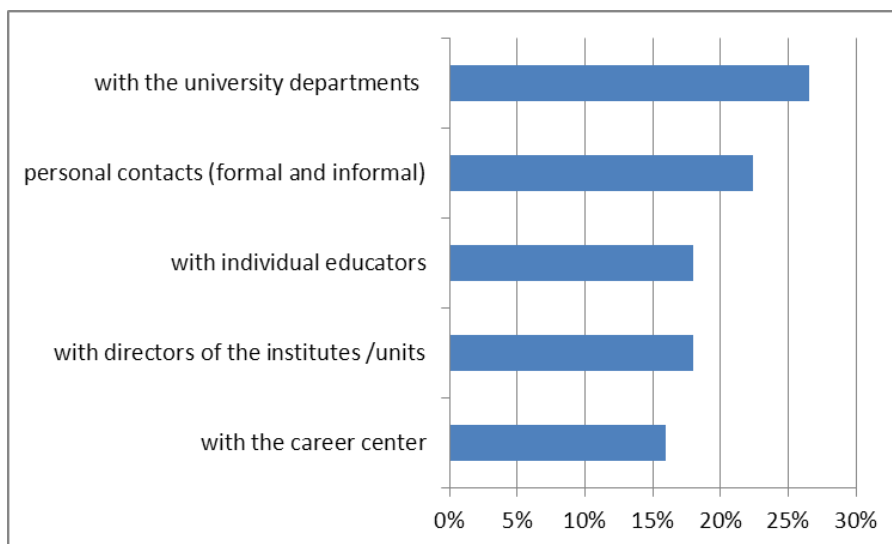


Figure 7. Assessment of P5' respondents

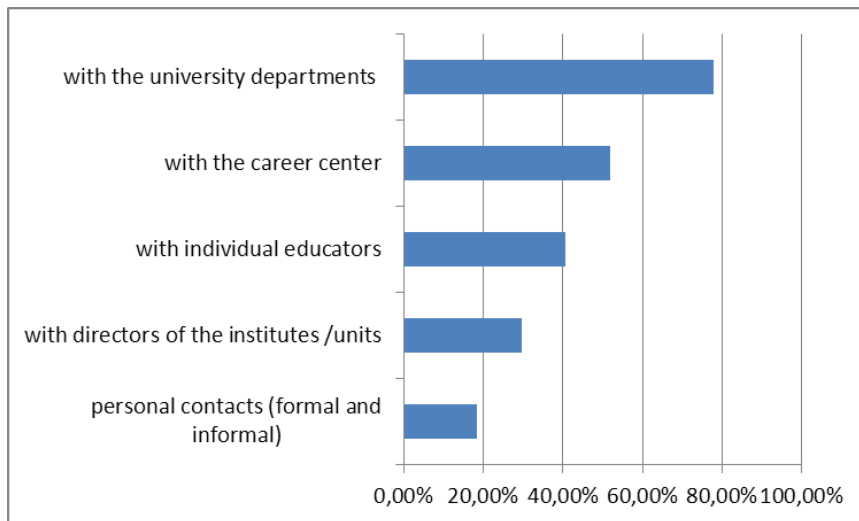


Figure 8. Assessment of P8' respondents

These data emphasize the need to strengthen communication between departments and the university management bodies.

Interesting findings:

- The 3rd package included the question about self-assessment of companies in regard to their readiness to accept students for practice and indicate and work in the areas of improvement. Most companies willingly express their readiness for reflection and self-assessment.
- As an instrument to improve effectiveness of the practical training organization, the companies offer better *company-university* interaction on the level of supervisors/mentors, and involvement of students in the project work.

Table 8. Q: What do you think should to be done to improve the effectiveness of your company in providing student practical training? (three options), %

Proposals	LMSU	SibFU	OSU	ASOI
To appoint a responsible person (supervisor) and mentors in the company	50	49	26	30
To change the regulatory framework in the company	17	5	15	12
To improve interaction between company and university	89	71	44	51
To pay students	22	24	15	44
To involve students in the project team(s)	44	47	26	37
To improve interaction with the supervisors/ mentors	50	43	37	30

PACKAGE 4: EVALUATION OF THE RELATIONSHIPS BETWEEN PRACTICAL PLACEMENT AND STUDENT EMPLOYMENT FROM THE POSITION OF THE EMPLOYER

The last set of questions in the questionnaire was related to the evaluation of the relations between practical training and student employment from the point of view of employers and on determining the prospects in this direction.

We propose the question: *Is your organization ready to employ students after practical training?*

Interesting findings:

- Almost half of the respondents say that they are ready to employ graduates; the rest expressed their willingness under certain conditions, such as availability of vacancies, sufficient level of student practical training experience, efficient practice in the company, compliance with the stated requirements, selection procedure, etc.
- Despite the fact that organizations often underestimate the importance of practical training, they confirm that they meet potential employees during practical training.

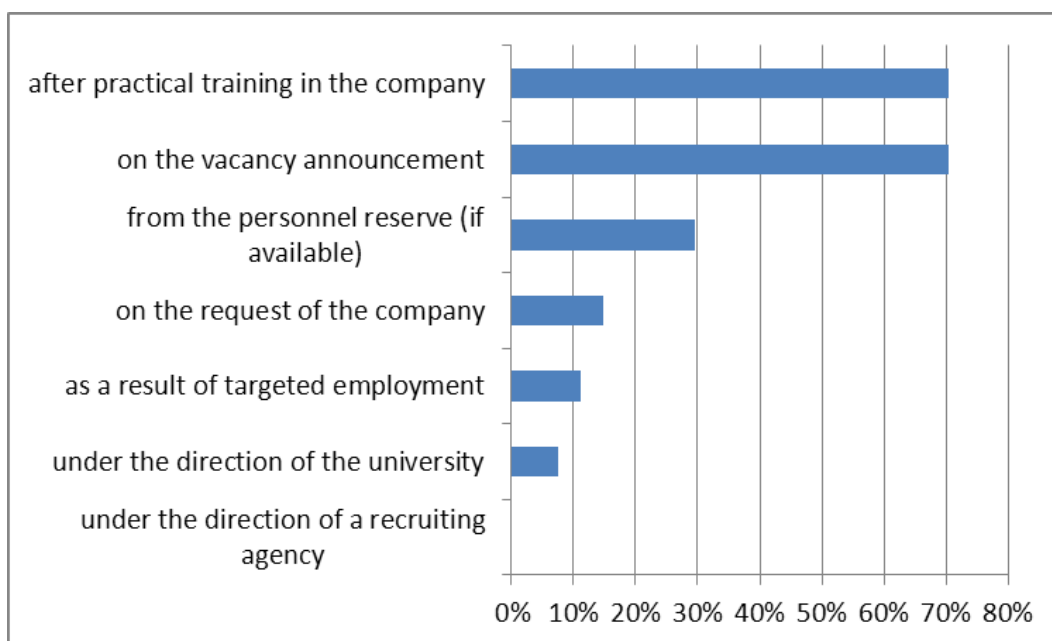


Figure 9. Q: How do graduates usually get employment in your company? (three options), %

- Talking about the criteria for the graduate's employment, companies chose knowledge and competences as top priorities, following by learning ability and commitment. Hard skills, soft skills, and digital skills in general were much-in-demand as well.

Table 9. Q: What criteria do you use for graduates' employment? (five options), %

Answer	LMSU	SibFU	OSU	ASOI
The diploma confirming formal education	28	50	74	77
Educational records, the average diploma score	28	17	30	71
Practical training in your company	61	46	44	48
Knowledge and competences	83	83	93	90
Work experience	44	50	22	29
Foreign language proficiency	44	8	7	14
Computer skills	50	42	52	34
Commitment	55	63	56	66
Erudition	33	33	26	34
Learning ability	61	67	67	66
Family dynasty	0	4	4	6
Management trust	11	13	4	6
References	22	25	22	12

- Talking about evaluation methods of potential employees for enrolment, most companies named interviews, professional testing, case and stress testing, and surveys.
- As for students' input to the companies, most employers focused on new ideas, new forms of communication, and new working methods/ approaches.

Table10. Q: What do students bring to your organization?, %

Students' after-practice impact	MSU	SFU	OSU	ASOI
New ideas	88	64	58	67
New working methods/ approaches	22	14	23	16
New values	22	18	4	12
Cost savings	16	27	15	2
Competition	22	32	15	30
New forms of communication	44	40	42	31
Additional problems	0	6	0	3

- About half of the respondents answered positively to the question if their company was ready to accept more students to practical training.

CONCLUSION

The research shows that student work-based practical training is an integral part of the educational process in Russian universities and the first step of young people to the labour market.

At the same time all three actors (University – Employer - Student) require improvement of both - procedures and content of practical training.

On the basis of the conducted analysis, the Russian partner universities have come up with preliminary directions for improvement:

1. Strengthening of interaction between various university structures – departments, career centers, etc., involved in the process of organizing students' practical training.
2. Strengthening of interaction between universities and companies, including:
 - creation of working groups from representatives of core businesses and university structures in order to jointly develop/make changes to the practical training programmes, both in terms of their content and organizational aspects
 - building mechanisms for interaction between university practice supervisors and company mentors
3. Involvement of students and, probably, university practice supervisors in participation in projects, creative work within the framework of practical training.
4. Introduction of innovative approaches to student assessment, correlated with the methods of evaluating candidates for vacancies in particular companies as an element of practical training.

The shared experiences and the development of proposals within the UNILAB project will improve the organization and content of student practical training as an educational element and grant better employment opportunities of graduates.

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