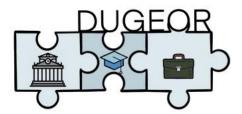




D 2.2 Report on company needs for DHE in GeorgiaReport title

Strengthening capacities for the implementation of dual education in Georgia higher education

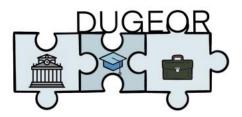




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	This document reports on potential and prospects for dual education in
Abstract	Georgia, as perceived by businesses. It is developed as part of the project
	"Strengthening capacities for the implementation of dual education in
	Georgia higher education" (DUGEOR).

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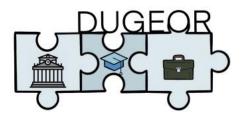


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DISCLAIMER

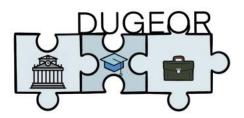
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or [name of the granting authority]. Neither the European Union nor the granting authority can be held responsible for them.





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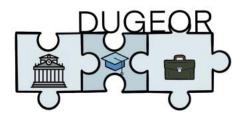


Introduction

This research report aims to identify and assess employers' requirements and attitudes towards dual education. This study is carried out within the framework of the European Union-funded project "Strengthening capacities for the implementation of dual education in Georgian higher education" - DUGEOR. The goal of the project is to improve the competencies of higher education graduates and increase their employment opportunities in the labor market in Georgia, taking into account the best practices of EU member states.

The following European and Georgian universities participating in the project carried out the survey:

- Univerzitet U Novom Sadu (UNS), Serbia,
- FH Joanneum Gesellschaft Mbh (FHJ), Austria,
- Duale Hochschule Baden-Wurttemberg (DHBW), Germany,
- Univerzitet Privredna Akademija U Novom Sadu (UBANS), Serbia,
- Georgian Institute of Public Affairs (GIPA), Georgia,
- LLC Batumi Navigation Teaching University (BNTU), Georgia,
- Iakob Gogebashvili Telavi State University (TeSaU), Georgia,
- Batumi State Maritime Academy (BSMA), Georgia,
- Georgian Technical University (GTU), Georgia.



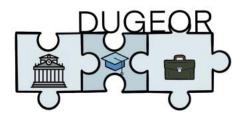


Dual Higher Education

Dual higher education is a flexible and more efficient form of student study practice and is part of the study program. In parallel with studying at the university, the students work according to the specialization, which allows them to study in two different places at the same time - at the university and at the company. Dual education considers the company as a student's learning environment together with the university. The system of dual higher education integrates three parties: the student/the higher education institution/the company. Accordingly, DHE has multiple benefits, such as: The students acquire practical knowledge and skills in the working environment, which increases their employability; Businesses and companies find it easier to find qualified professionals, which avoids the costs associated with human resource risks and improves their production process and service delivery; Universities are adapting their curricula to the demands of the labor market and increasing their attractiveness as graduate employment rates improve. Along with this, dual education also has a social impact, within which students with low socio-economic opportunities receive significant benefits as a result of conducting study and work together, which to a certain extent allows them to solve the problem of covering the tuition fees.

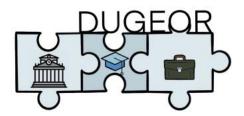
The purpose of dual higher education is to plan the learning process in real working conditions, and its implementation depends on the readiness of the labor market to be involved in the education process together with higher education institutions. Needs assessment includes the study of the following issues: What are the requirements for graduates of higher education institutions? What could be the company's contribution to the training process? Can the company provide any type of financial support for the students in training practice? Can the company assign mentors who will supervise and evaluate the students' work? How many students can be hired for practical training, etc.

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In order to develop a dual higher education model, an assessment of labor market needs was conducted. In total, 96 organizations operating in Georgia were interviewed during the research process. 30% of them represented micro companies, 30% - small businesses, 25% - medium businesses and 15% were large companies (according to the number of employees).





Research method

The purpose of the study was to assess the needs of the labor market in Georgia and the requirements of companies for graduates of higher education institutions, as well as their readiness to be included in the model of dual higher education.

The design of the study was developed within the framework of the DUGEOR project, which is implemented by higher educational institutions operating in Georgia - GIPA - Georgian Institute of Public Affairs, Georgian Technical University, Iakob Gogebashvili Telavi State University, Batumi Navigation Teaching University, Batumi State Maritime Academy. While working on the research design, we also took into account the recommendations of the Ministry of Education and Science of Georgia and the National Center for Educational Quality Enhancement. During working on the research questionnaire, we utilized the experience from European universities and other similar studies.

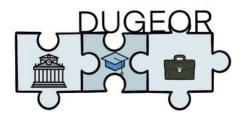
It is worthy to mention, that our attention was focused on collecting data about the interests, needs and attitudes of companies operating in Georgia, in order to evaluate the possibility of companies to become potential partners of DHE with Georgian higher education institutions.

In order to survey the companies, a digital questionnaire has been created, which consisted of three parts. In the first part, we were interested in the available information about the company, the number of employees, the field of activity, staff turnover, etc.

In the second part, we asked the companies to qualitatively assess the level of training of the graduates, the compatibility of their skills with the job requirements, as well as the positions where it was most difficult to hire qualified personnel.

In the third part, we were interested in whether the companies had experience of cooperation with universities, how many students they could accept for work practice during the semester, if

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they would be able to pay students for their work or provide financial support in any way, as well as their willingness to participate in the process of developing and implementing curricula.

During the research process, we had been in contact with the respondents, who were either the company's direct supervisor, top management representative, or head of the human resources service, and later, as a result of a telephone or direct face-to-face interview, we collected the answers in the appropriate form.

Limitations of the study

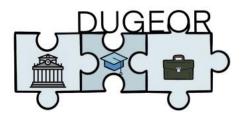
The results of the survey obtained herein were not based on a representative sample, and these results cannot be generalized in order to describe the needs and interests of the employment market within the framework of the dual higher education system. In addition, the selected companies represent only Tbilisi, Adjara, and Kakheti regions, and the principle of cluster selection has not been applied.

However, still, the existing responses showed unequivocal support for the dual higher education system, and the willingness to be engaged in this model was expressed by almost all of the interviewed subjects.

Study results

Companies were selected according to the regions of Tbilisi (44 companies), Adjara (40 companies) and Kakheti (10 companies). A total of 96 companies were interviewed, of which 30% were micro companies (up to 10 employees), 30% - were small companies (10-49 employees), 25% - were medium (50-249 employees), and 15% large companies (more than 250 employees).

The field of interest of the interviewed organizations is diverse and includes many sectoral directions, such as: gambling business, health care and social work, production and supply of electricity, gas, steam and air conditioning, scientific and technical activities, real estate business,





financial and insurance activities, water supply, information and communication sector, public administration, construction, wholesale and retail trade, hospitality, agriculture, forestry, manufacturing, transportation and warehousing, other services (chart 1).

Companies participating in the research are mainly active in the following sectors: transportation and warehousing (20% of surveyed companies), manufacturing - 14%, agriculture, forestry and fishing - 12%, hospitality - 10%, wholesale and retail trade - 9%.

All the companies we surveyed employ at least one personnel with higher education. The employment rate of university graduates in micro-companies ranges from 20% to 80%, while in some large companies with more than 250 employees, the share of university graduates is below 20% (construction, road rehabilitation sector) (chart 2).

It is also worth noting that in some companies the share of university graduates is 100% (for example, in service companies and public institutions). On average, the share of university graduates in the organizations participating in the study is 52% (median average 50%, min.: 6%, max.: 100%).

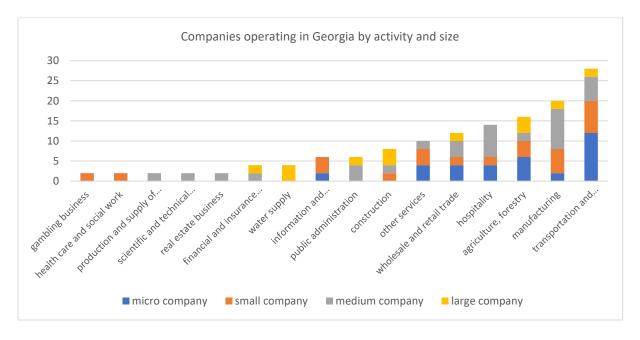
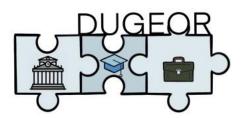


chart 1. Companies operating in Georgia by activity and size





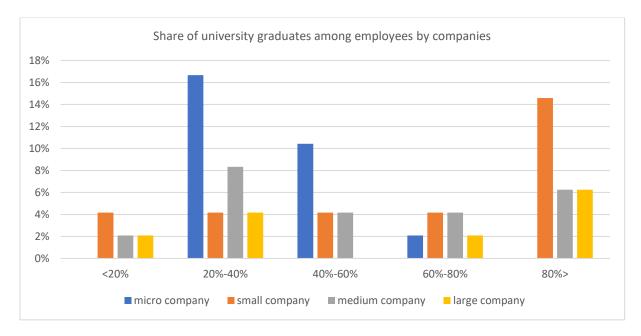


chart 2. Share of university graduates among employees by companies

The staff turnover rate in the surveyed companies is within 1%-50% and according to the size of the companies it is illustrated on chart 3:

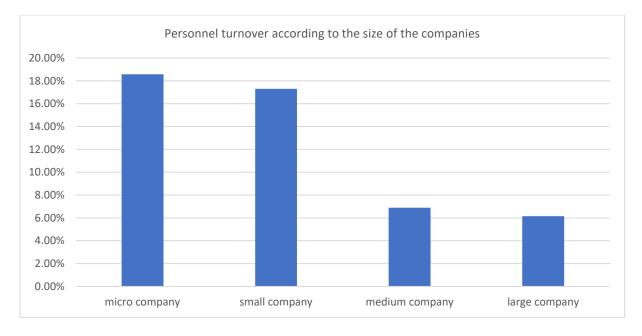
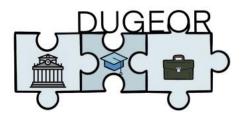


chart 3. Personnel turnover according to the size of the companies





The core interest of our research was aimed at finding out what is the need for employment of persons with higher education in companies and how much they meet the requirements set by the company. To the question we asked - do you agree that there is a need for additional employment of personnel with higher education in the company - the vast majority of companies confirmed the existence of such a need (chart 4).

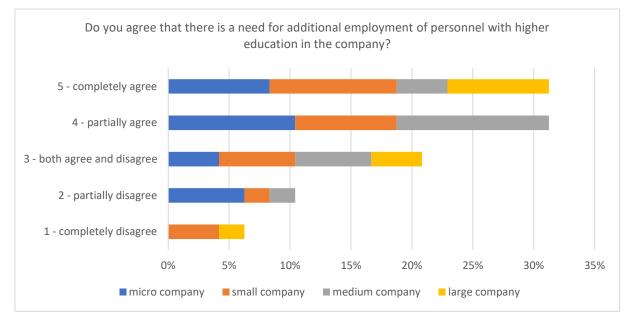
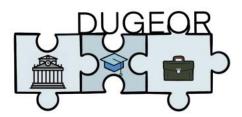


chart 4. Attitude towards the need to recruit personnel with higher education

Companies face difficulties when hiring personnel with higher education, which is mainly related to their adaptation to the real work environment. To the question - do you agree that there are difficulties/barriers in recruiting adequate personnel with higher education for certain positions - the answers of the companies were distributed as follows (chart 5):





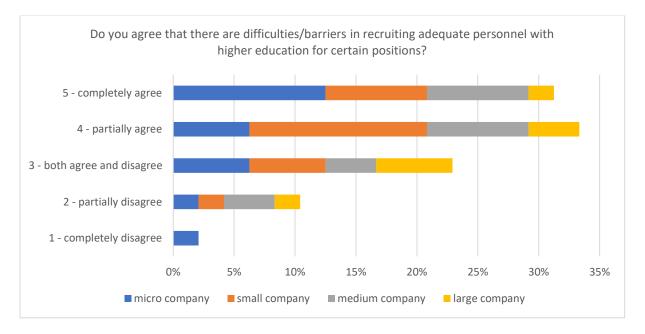
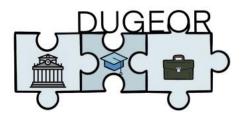


chart 5. Evaluation of the qualifications of the staff hired for work

Among the most demanded and critical positions, where companies experience a shortage of qualified personnel, are managerial and engineering positions (Graph 6):



chart 6. The need for qualified personnel according to positions





54% of the surveyed companies have the experience of cooperation with Georgian higher educational institutions, which in most cases is supported by special contracts. Mostly, companies and universities cooperate in the direction of student internships, although company representatives are also actively involved in joint projects and research activities, lecturing, etc. (chart 7):

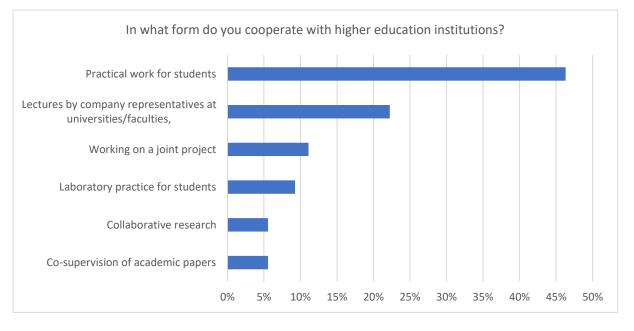
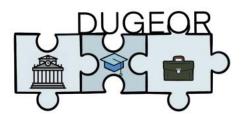


chart 7. Cooperation with higher education institutions

To our question - would you participate in the development of dual training programs in accordance with the profile of your company? Most of the companies (73%) believe that they should be involved in the dual education system. 21% of the respondents do not have a defined position and it seems that this is mainly due to two reasons, either their head offices are located outside Georgia, or it is a government agency and such a decision requires the approval of the head office. Only a few micro-companies denied the potential of their involvement in dual education (2%) and 4% of respondents avoided answering. Overall, it is clear that most companies express their desire to increase their contribution to the dual education system (chart 8).





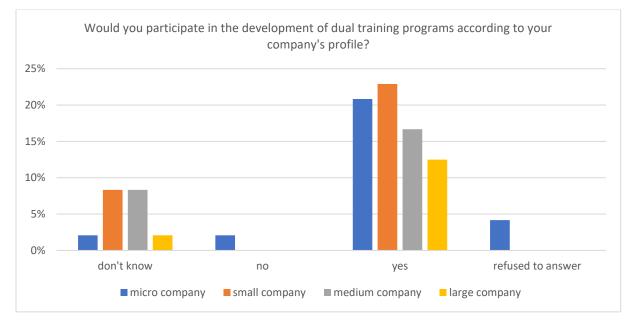
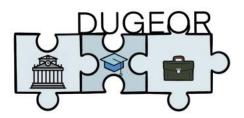


chart 8. Involvement in the development of a dual study program

We were also interested to which extent the dual form of education can support the work process in the company and how effectively this process will help to eliminate the shortage of qualified personnel in the labor market. As it turned out, the answers to these questions significantly correlate with each other.

48% of companies fully and 33% almost fully believe that a dual form of education can help and support the process of work or service delivery in their organization. 15% of surveyed companies see a positive potential in this process, and only 4% of companies are somewhat skeptical about the potential of dual education. It should be noted that no organization expressed a categorical refusal against the dual education system (chart 9).

As for the impact of the dual system on eliminating the shortage of qualified personnel, the vast majority of companies - 96% (71% fully agree, and 25% almost completely agree) believe that the dual form of higher education will play an important role in reducing the shortage of qualified personnel. The answers show that the majority of companies are convinced that dual education has the potential to increase the number of adequate personnel in the employment market (chart 10).





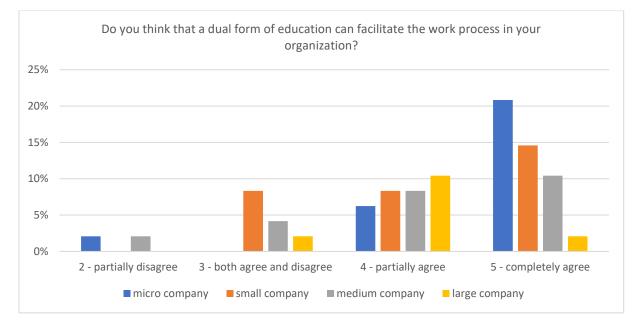


chart 9. The impact of the dual model on the work process

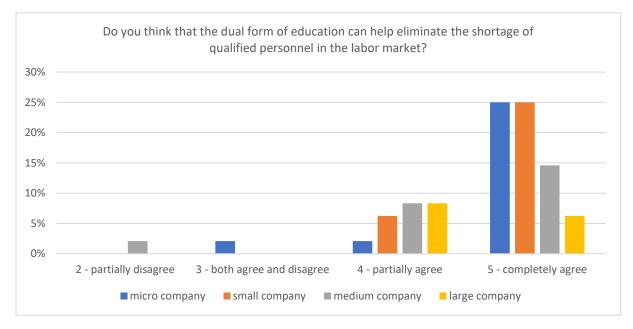
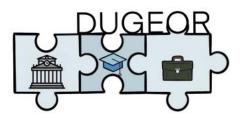


chart 10. Dual education and reducing the shortage of qualified personnel

The implementation of the dual higher education model largely depends on the extent to which companies have the opportunity to employ students in their organization during the training period. 85% of companies have the opportunity to offer students practical education in their organization. 13% of the companies are not sure of their capabilities and only 2% of the





participants say they refuse to accept students' practical work (chart 11).

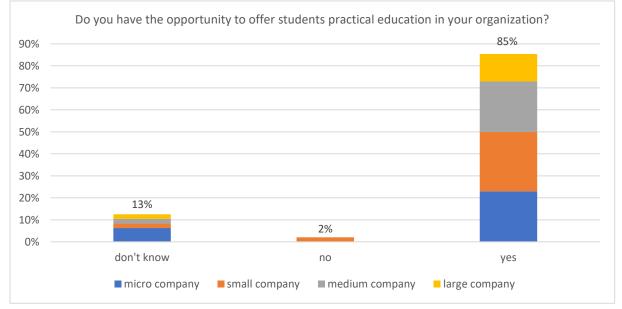
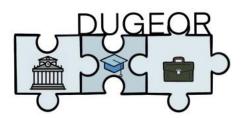


chart 11. Possibility of student internship

81% of the represented companies have the opportunity to employ students on student internships in their organization every year, while 19% do not have the opportunity to do so (see chart 12). As a minimum, micro, small and medium-sized companies can accept 1-2 students annually. As the size of the company increases, the greater is their ability to get students on work placements.





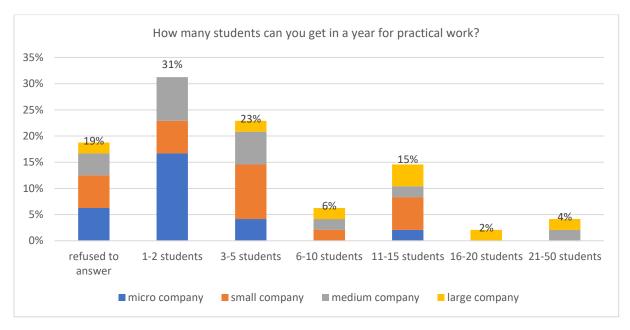


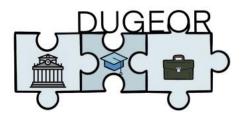
chart 12. How many students can companies accept?

We were also interested in what was the preferred and mutually beneficial form of employment of students on work practice that would be equally acceptable to both the organization and the student's learning goals. We did not offer respondents a choice in the proportions of theoretical and practical hours of study (eg 1 week/semester at university - 1 week/semester at workplace, full/part time). Instead, we asked the respondent to state their own position regarding the allocation of practice time.

Many interviewees expressed the opinion that the current system of practice, does not meet the goals needed to develop the relevant skills in students on the one hand, and on the other hand, it is not in line with the interests of the company, which strives to maximize benefit from the student's employment and productivity.

According to the interviewees, one-semester work practice is the most acceptable, since during this time the continuity of the work process will be ensured and it will be possible to start, finish and report on service projects. Also, it was mentioned, it is of great importance for the student to concentrate on work and to understand the sequence of tasks to be performed.

In addition to the one-semester in a HEI/one-semester-in-a-company model, a certain part of the interviewees favor, a one-week alternation of theoretical and practical training. In any case, the





vast majority of the respondents believe that hours of theoretical teaching and practical work should be equally represented in the curriculum.

One of the most important question referred to the extent to which companies are ready to provide financial support to students employed on internships. In order to ensure that the companies in the survey did not feel any obligation, we did not separate the different expressions of financial support with separate variables (salary, travel, communication compensation, meals). Instead, our question was presented in a general way: "Would you be able to financially support dual students who will actually work with you during the semester? As it turned out, 46% of the surveyed companies will definitely reimburse students for certain expenses. Following such a response, we delved further into the issue and asked respondents to specify what they meant by financial support to students will do so in the form of remuneration. 31% of respondents do not know if they will be able to provide financial support to students in any way, 15% think they cannot do it, and 4% avoided answering (chart 13).

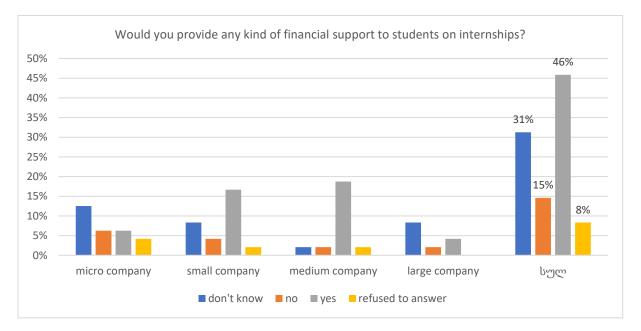
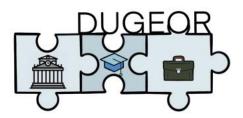


chart 13. Willingness of companies to financially support students in any way

Most of the companies are also eager to engage in the dual training system with their own human resources and assign mentors to guide the students. This is an important result from the point of view that the mentoring is a contribution to the company and therefore an increased motivation





of the company to develop students with skills that can potentially be used to increase the productivity of the company (chart 14).

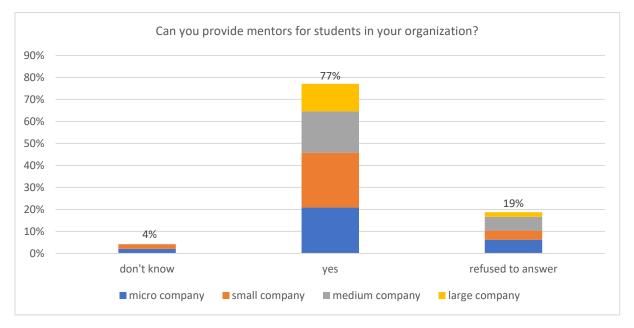
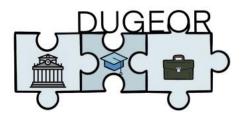


chart 14. The attitude of companies towards the appointment of mentors

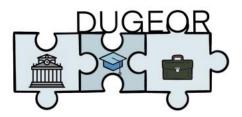




Conclusion

Overall, the study showed that:

- There is a shortage of qualified graduates in the labor market;
- According to the employer, mutual cooperation between the university and the labor market in the model of dual higher education will contribute to the training of qualified personnel on the one hand, and to the increase of productivity of companies on the other hand;
- Many companies represented in the labor market of Georgia have been cooperating with universities for many years, in terms of student placement, therefore the dual higher education model is a flexible and more effective form of student study practice for them;
- It is acceptable for companies to provide financial support to students employed on internships;
- Companies are ready to engage in curriculum development with universities and allocate mentors to guide students during internships;





Questionnaire

Section 1.

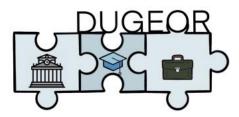
- Interviewer's name and surname
- Interviewer's phone number
- Interviewer's email
- Which university does the interviewer represent?

Section 2.

- Company name
- Company website (if any)
- Company headquarters
- City/Municipality
- Number of employees:
- What is the rate of personnel turnover, in particular, the frequency of hiring a new employee over time?
- Number of employees with higher education:
- What is your company's main product? What kind of services do you provide?
- Type of company activity (you can choose more than one option):

Section 3.

- There is a need for additional employment of personnel with higher education in our company?
- Do you have difficulties/barriers in recruiting adequate personnel of higher education for certain positions?
- In which job positions do you find it difficult to find educated personnel with higher qualifications? Please indicate which job positions.
- What skills and abilities should a person with higher education possess in order to be able to work in your organization? You can select multiple settings.
- Do you have experience of cooperation with higher education institutions?
- Have you signed cooperation agreements with higher education institutions?
- Tell us which higher educational institutions you have signed cooperation agreements with?
- What services do you offer to higher education institutions? You can select multiple options.
- Do you think that a dual form of education can facilitate the work process in your organization?
- Do you think that the dual form of education can help eliminate the shortage of qualified personnel in the labor market?
- Do you have the opportunity to offer students practical education in your organization?
- If the answer to the previous question is yes, how many students can you accept in a year for practical work?





- If the answer to the previous question is yes, can you provide mentors for students in your organization?
- Do you agree that potential mentors in your organization should receive short trainings so that they can guide and evaluate students?
- Will you be able to financially support dual students who will actually work with you during the semester?
- Would you participate in the development of dual training programs in accordance with the profile of your company?
- Would you add anything?
- Name and surname of the respondent:
- Position of the respondent in the organization:
- Telephone and e-mail address of the respondent:
- Can we contact you in case of additional questions?