

UDC 377:331

SCOPUS CODE 1401

<https://doi.org/10.36073/1512-0996-2025-1-77-83>

Adaptation of Vocational Education to Labor Market Requirements

- Khatuna Kharkhelaury** department of business administration, Georgian Technical University, Georgia, 0160, Tbilisi, 77, M. Kostava str.
E-mail: Kh.kharkhelaury@gtu.ge
- Tamari Kajaia** department of business administration, Georgian Technical University, Georgia, 0160, Tbilisi, 77, M. Kostava str.
E-mail: t.kajaia@gtu.ge
- Tamar Khinikadze-Gvaramia** Department of Business Administration, Georgian Technical University, Georgia, 0160, Tbilisi, 77, M. Kostava str.
E-mail: t.khinikadze@gtu.ge

Reviewers:

T. Babunashvili, President of the Academy of Business Sciences of Georgia, Doctor of Economic Sciences

E-mail: temur.babunashvili@mail.ru

M. Soselia, Associate Professor Faculty of Business Technologies GTU

E-mail: Soseliamaia11@gtu.ge

Abstract. The main priority of the Georgian government is the formation of a strong education system, which will help the country overcome several problems. In this regard, it is very important to improve one of its constituent parts, the system of professional education, because it is professional education that is the most effective tool for socio-economic development, progress, and strengthening of the country.

For the country to have a quality professional education system based on business and labour market requirements and adapted to it, which will be able to immediately respond to challenges and deal with them, it is necessary to adapt professional education to the requirements of the labour market, strengthen the role and involvement of public-private partnerships, education forms and methods. Renewal - development of a set of implementation mechanisms, which ultimately means

perfecting the state management system of vocational education.

Keywords: labor market; professional education.

Introduction

The main task of professional education is to prepare a qualified, competitive professional staff in the labor market. This is a system where the graduate goes to employment most shortly. Training is carried out in professional educational institutions with the involvement and participation of partner organizations.

Vocational education allows any person to develop/display/acquire both theoretical and practical professional skills, which in turn allows for successful employment. As the best experience of developed countries shows, for the most beneficial results for the de-

velopment of the country, it is advisable for vocational education programs to be as closely aligned as possible with the requirements of the local labor market.

Main Part

The main task of professional education is to prepare a qualified, competitive professional staff in the labor market. This is a system where the graduate goes to employment most shortly. Training is carried out in professional educational institutions with the involvement and participation of partner organizations.

Vocational education allows any person to develop/display/acquire both theoretical and practical professional skills, which in turn allows for successful employment.

In 2021, 11,414 vacancies were registered by¹ 875 employers in the labor market management information system, which is an average of 13 vacancies per employer. The majority of vacancies belonged to the main occupational groups: service and sales (39%), beginner qualification (26%), craftsmen (21%), and industrial equipment operators (6%). Accordingly, qualification requirements for the majority of vacancies included secondary (46%) and **professional (42%) education**, and the specific share of vacancies requiring higher education (6%) is quite small. Like the main professional groups, the following are the leaders in terms of vacancies entered into the system: trade (31%), other services (18%), tourism (15%), and construction (9%) sectors. (Ministry of Economy and Sustainable Development of Georgia 2022)

Based on the data of the labor market information system, which in turn is based on the processed information of the two employment agencies Worknet² and HR.GE³, we can create a general picture of the vacancies in the labor market and their qualification requirements. It should be noted here that the given information is grouped according to the main groups of the International Classification of Employment (ISCO 08). (Internacional Labour Office - ILO 2012) Since the cri-

teria of the mentioned classifier are used during the analysis of the data, the qualification requirements of the employers are comparable to the criteria of the international employment classifier.

According to ISCO-08, two dimensions of qualifications are used to classify occupations into groups. These are qualification level and qualification specialization. Qualification level is defined as a function of the range and complexity of the tasks and assignments performed within the profession. It is measured according to the following operational factors: 1) by the nature of the work performed within the profession, related to the typical assignments and tasks defined for each qualification level of ISCO-08; 2) with the level of formal education defined by the International Standard Classification of Education (ISCED-97) (UNESCO, 1997) and which represents the established requirement for the competent performance of specific tasks and duties; 3) The amount of informal, on-the-job training and experience within the relevant profession required to competently perform the aforementioned tasks and duties.

With the mentioned classifier, four ISCO qualification levels and their definitions are also defined.

We focus on the second level of qualification, which combines the use of machinery and electrical equipment, driving a vehicle, repair and maintenance of electrical and mechanical machinery and equipment, and sorting, retrieving and storing information.

At the second level of qualification, in the case of almost all professions, it is necessary to have such skills as the ability to read information related to safety instructions and make a written report on the work performed, as well as the ability to perform simple arithmetic calculations. Many occupations at this qualification level require relatively high levels of literacy, numeracy and interpersonal skills. Some occupations at this level require vocational training after secondary education (ISCED-97 Level 4). In some cases, experience and advanced training can replace formal education.

¹ It is a public web portal created on the principle of "one window", which provides updated information on labor market trends, career planning and professions in the country to various users.

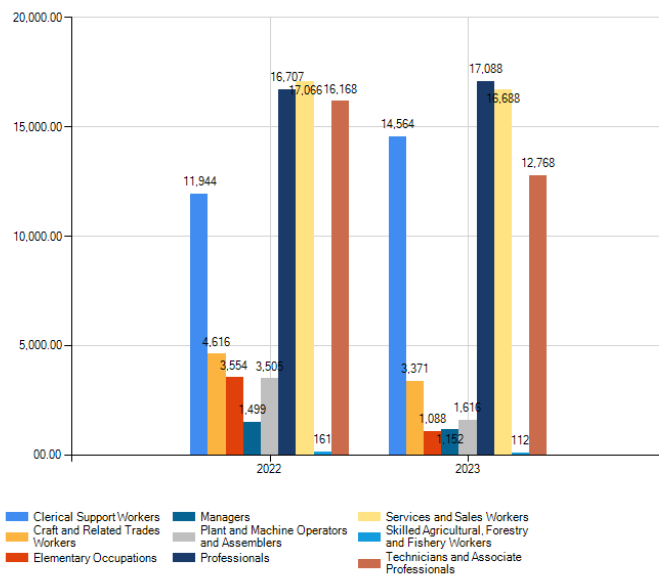
² State Employment Promotion Agency.

³ "Employment Agency Echar".

Occupations classified at level two include bus drivers, secretaries, accountants, tailors, clothing designers, sales consultants, police officers, hairdressers, building electricians and car mechanics. (Internacional Labour Office - ILO 2012). In the same document, according to the correspondence between the qualification levels of the basic groups of ISCO-08, the second qualification level cor-

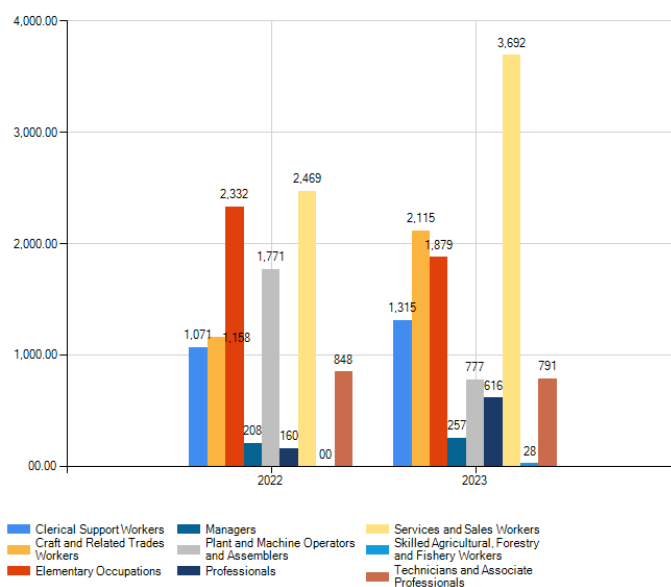
responds to the support staff of the 4th office; 5th service and sales specialists, 6th agriculture, forestry and fishing specialists; and 7th Craftsmen and allied workers, and 8th Industrial plant and machinery operators and assemblers. It is according to these groups that the information about vacancies is processed by the above two agencies.

Diagram 1. HR.GE: Number of Published Vacancies by Major Groups of ISCO 08



Source: (Labour Market Information System 2023)

Diagram 2. Worknet: Number of submitted vacancies by Major Group (ISCO 08) 2022-2023



Source: (Labour Market Information System 2023)

The demand for technicians and support specialists (3rd main group) includes vacancies: In terms of business, information and communication technology, healthcare, scientific and legal support specialists. There is a high qualification requirement for vacancies in the main professional group of technicians. (3 years of formal education in a Higher educational institution) Accordingly, vacancies also require experience and high-level skills from job seekers. Among the main professional group of technicians, the greatest demand is for business and administrative support specialists (74%), of which it is worth noting, Commercial sales representatives (53%), credit and loan officers (17%) and office supervisors (12%). From the mentioned subgroup, the elementary professional groups of insurance representatives (5%), real estate agents (5%), buyers (4%) and

accounting specialists (3%) also stand out due to the abundance of vacancies.

The qualification requirement for the main occupational group of industrial plant and machinery operators requires vocational education. Among the above-mentioned main group, vacancies are mostly for operators of sustainable industrial equipment and machines, whose work is related to work on the production line (61%), metal (28%) and paper (10%) equipment operation. (Employment agency Eichar HR.GE 2024).

According to the information of the Ministry of Education and Science of Georgia (Ministry of Education and Science of Georgia 2024), there is a qualification (620) certificate (409) Professional education program. These programs are implemented by various types of educational institutions.

Table 2. Educational institutions implementing professional programs

		<i>Frequency</i>	<i>Percent</i>	<i>Valid percent</i>	<i>Cumulative percent</i>
<i>Valid</i>	<i>Authorized private professional/Community College</i>	<i>35</i>	<i>46.7</i>	<i>46.7</i>	<i>46.7</i>
	<i>Authorized State College</i>	<i>19</i>	<i>25.3</i>	<i>25.3</i>	<i>72.0</i>
	<i>General educational institution implementing professional programs</i>	<i>2</i>	<i>2.7</i>	<i>2.7</i>	<i>74.7</i>
	<i>Higher educational institution implementing professional programs</i>	<i>12</i>	<i>16.0</i>	<i>16.0</i>	<i>90.7</i>
	<i>A college established with equity participation of the state</i>	<i>7</i>	<i>9.3</i>	<i>9.3</i>	<i>100.0</i>
	<i>Total</i>	<i>75</i>	<i>100.0</i>	<i>100.0</i>	

Source: (Ministry of Education and Science of Georgia 2024)

We randomly selected 10 organizations from the mentioned list and studied the professional programs implemented by them. Eight of the selected colleges mainly offer vocational education programs in a narrow field: College "Ikaros" in the direction of cooking and restaurant services; Ltd - public college Natali academy - in the direction of make-up artist and stylist, nail, hair and skin care; Ltd - Naval Training Center "Equator" and Ltd - Batumi Navigation Training University in the direction of training ordinary sailors; Ltd - „Sio“ and

Ltd - The College of Tertiary Medicine offers nursing, home care and pharmacy programs. Ltd - Yakob Gogebashvili Georgian College offers only the "Financial Services" program, Ltd - The Aviation University of Georgia offers training programs for aircraft pilots and technical service specialists.

Two educational institutions, LEUNL (Legal entity under public law) - College "Spectri" and LEUNL - College "Tetnuld" implement professional programs of various engineering and construction directions, which

are included in the list of analytical indicators of the labour market discussed above.

Recently, various studies conducted on labour market issues in the country studied the attitude of employers and society towards professional education. In addition, they revealed difficulties in terms of finding a workforce, of professional groups with both high and low qualification requirements. Employment difficulties are due to the lack of jobs (especially in the regions) on the one hand, and the lack of personnel with relevant knowledge, skills and experience on the other hand. This is accompanied by global trends caused by internal and external factors. In particular, increased migration opportunities, demographic changes, new work organization arrangements and the use of new technologies. (United Nations Development Program (UNDP) 2020)

The majority of employers consider vocational education to be important both for the company's activity and for reducing unemployment in the country and strengthening the economy. Despite such a positive attitude, the degree of cooperation between employers and vocational schools is quite modest, which is explained by the lack of information, the absence of narrow speciality study programs, the lower prestige of vocational education and the scarcity of relevant human resources in the company. Companies also believe that the initiation of cooperation should come from vocational schools and be linked to informing them about programs and various opportunities. According to employers, professional education more or less meets the requirements of the labor market however, at the same time, they believe that it is an opportunity to quickly master the profession and find employment. Employers positively assessed the availability of professional education from a financial and geographical point of view. (Kajaia and Khatkhelauri 2023) At the same time, they highlighted the challenges related to

the choice of professional education by young people and the desire to start work. The opinion was expressed that those who choose vocational education have little understanding of professions and employment opportunities. Choosing a profession is often not related to one's interests. There are frequent cases when vocational school students do not agree to the offered service after completing industrial practice. Low motivation may be related to expectations related to pay. Along with low wages, the problem of finding staff is related to the outflow of the labor force from the country. Research has shown that professional education is rarely mentioned in qualification requirements and employers specify higher education in positions where there is no need for it. This significantly reduces the popularity of professional education. At the current stage, the vocational education system is not yet fully oriented to the labor market and changing needs.

Conclusion

Compliance and compatibility of professional education with the requirements of the labor market is one of the system's priorities – the employer chooses what skills and competencies he needs. It is better if the state allocates more material resources, tries to attract employers, develops mechanisms to encourage them, and provides them with qualified personnel since the passive involvement of employers in the development of this direction of education remains a problem. It is desirable to conduct systematic studies that will help them to better define the requirements of the labor market and train professional students accordingly. The state should pay special attention to the professional education system so that professional education can effectively meet and provide the requirements of the labor market with the appropriate qualified personnel.

References

1. Employment agency Eichar HR.GE. *HR.GE*. 2024. <https://www.hr.ge/>.
2. Internacional Labour Office - ILO. (1012) *International Standard Classification of Occupations 2008 (ISCO-08)*. Geneva: ILO.
3. Employment agency Eichar HR.GE. (2024). *HR.GE*. Retrieved from <https://www.hr.ge/>
4. Internacional Labour Office - ILO. (2012). *International Standard Classification of Occupations 2008 (ISCO-08)*. Geneva: ILO.
5. Kajaia, T., & Khatkhelauri, K. (2023). *Local labor market and its impact on vocational education in Georgia*. Tbilisi: International Scientific Conference Gtu. Globalization and modern business, GTU. Retrieved from <https://gtu.ge/bef/research/journals/journal2.php>
6. Labour Market Information System. (2023). *Labour Market Information System, Plan the Future*. Retrieved from <https://www.lmis.gov.ge/Lmis/Lmis.Portal.Web/Pages/User/Dashboard.aspx?CategoryID=c430754d-3804-4004-846f-366b57f92e91>
7. Ministry of Economy and Sustainable Development of Georgia. (2022). *Analysis of the labor market of Georgia 2022*. Tbilisi: Labor market information system - Plan For the Future. Retrieved 2023, from <https://www.lmis.gov.ge/Lmis/Lmis.Portal.Web/Handlers/GetFile.ashx?Type=UserReport&ID=6d62d354-2f42-4614-9038-fdaea4c0d13d>
8. Ministry of Education and Science of Georgia. (2024). *Vocational Education*. Retrieved from <https://vet.ge/en/programs>
9. United Nations Development Program (UNDP). (2020). *Professional Education Program Graduates Research Report 2019 (Tracer Study)*. Tbilisi. Retrieved from [https://mes.gov.ge/uploads/files/322323\)_8765.pdf](https://mes.gov.ge/uploads/files/322323)_8765.pdf)
10. Kharkhelaui, Kh., & Kajaia, T. (2023). Local labor market and its impact on vocational education in Georgia. *Globalization and prospects for sustainable economic development*, 328-332.
11. Labour Market Information System. (2023). *Labour Market Information System, Plan the Future*. <https://www.lmis.gov.ge/Lmis/Lmis.Portal.Web/Pages/User/Dashboard.aspx?CategoryID=c430754d-3804-4004-846f-366b57f92e91>
12. Ministry of Economy and Sustainable Development of Georgia. *Analysis of the labor market of Georgia 2022*. Tbilisi: Labor market information system - Plan For the Future, 2022.
13. Ministry of Education and Science of Georgia. *Vocational Education* . 2024. <https://vet.ge/en/programs>.
14. United Nations Development Program (UNDP). "Professional Education Program Graduates Research Report 2019 (Tracer Study)." Tbilisi, 2020.

UDC 337:331

SCOPUS CODE 1401

<https://doi.org/10.36073/1512-0996-2025-1-77-83>

პროფესიული განათლების ადაპტაცია შრომის ბაზრის მოთხოვნებთან

ხათუნა ხარხელაური	ბიზნესის ადმინისტრირების დეპარტამენტი, საქართველოს ტექნიკური უნივერსიტეტი, საქართველო, 0160, თბილისი, მ. კოსტავას 77 E-mail: Kh.kharkhelauri@gtu.ge
თამარი ქაჯაია	ბიზნესის ადმინისტრირების დეპარტამენტი, საქართველოს ტექნიკური უნივერსიტეტი, საქართველო, 0160, თბილისი, მ. კოსტავას 77 E-mail: t.kajaia@gtu.ge
თამარ ხინიკაძე-გვარამია	ბიზნესის ადმინისტრირების დეპარტამენტი, საქართველოს ტექნიკური უნივერსიტეტი, საქართველო, 0160, თბილისი, მ. კოსტავას 77 E-mail: t.khinikadze@gtu.ge

რეცენზენტები:

თ. ბაბუნაშვილი, საქართველოს ბიზნესის მეცნიერებათა აკადემიის პრეზიდენტი, ეკონომიკის მეცნიერებათა დოქტორი

E-mail: temur.babunashvili@mail.ru

მ. სოსელია, სტუ-ის ბიზნესტექნოლოგიების ფაკულტეტის ასოცირებული პროფესორი

E-mail: Soseliamaia11@gtu.ge

ანოტაცია. საქართველოს ხელისუფლების უმთავრესი პრიორიტეტი არის ძლიერი განათლების სისტემის ფორმირება, რომელიც ქვეყანას არაერთი პრობლემის დაძლევაში დაეხმარება. ამ მხრივ, უმნიშვნელოვანესია მისი ერთერთი შემადგენელი ნაწილის, პროფესიული განათლების სისტემის სრულყოფა, რადგან სწორედ პროფესიული განათლებაა ქვეყნის სოციალურ-ეკონომიკური განვითარების, წინსვლისა და გამდიერების ყველაზე ეფექტური ინსტრუმენტი.

იმისთვის, რომ ქვეყანას ჰქონდეს ხარისხიანი, ბიზნესისა და შრომის ბაზრის მოთხოვნებზე დაფუძნებული და მასზე მორგებული პროფესიული განათლების სისტემა, რომელსაც შეეძლება გამოწვევებზე დაუყოვნებლივი რეაგირება და მათთან გამკლავება, აუცილებელია შრომის ბაზრის მოთხოვნებთან პროფესიული განათლების ადაპტაცია, საჯარო-კერძო პარტნიორობის როლისა და ჩართულობის გაძლიერება, სწავლების ფორმებისა და მეთოდების განახლება-დანერგვის მექანიზმების ერთობლიობის შემუშავება, რაც საბოლოოდ პროფესიული განათლების სახელმწიფო მართვის სისტემის სრულყოფას ნიშნავს

საკვანძო სიტყვები: პროფესიული განათლება; შრომის ბაზარი.

The date of review 04.10.2024

The date of submission 10.12.2024

Signed for publishing 25.03.2025