

SOCIO-ECONOMIC STATUS OF VOCATIONAL EDUCATION STUDENTS

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Introduction

In the modern technological era and under the circumstances of globalization, the capital of the country is not only material (industrial or service products) but also human – the knowledge of individuals. Human capital is what defines the socio-economic developmental level of the country. Vocational education is the most effective instrument for a country's social and economic advancement. Vocational education is a tested way of career and professional development of youth. The system is more attractive because of its closeness to the labor market, creating employment opportunities. By improving vocational education quality, the labor market attains qualified people, which is vital for the increase and steady development of every sector of the economy. Therefore, one of the main ways of overcoming unemployment in the country is to implement quality vocational education.

The importance of vocational development is proven by the fact that accessible, high-quality vocational education is one of the goals in Sustainable Development Goals (SDG) of the United Nations. Georgia has a responsibility to significantly increase appropriate skills in youth and adults for dignified employment or self-employment by 2030. Accessibility of vocational education is important for the 4th goal of SDG (Quality education) as well as for the 8th goal (Decent work and economic growth).

The reform of the vocational education system in Georgia started in 2013 and is aimed at increasing accessibility, inclusiveness, and professional qualification. The strategy integrates the perspective of the Georgian government about developing vocational education for the future. The axis of the strategy is the idea that one of the fundamental rights of people is to have access to education which is in accordance with the labor market and is of high quality. According to the Georgian government, this is also an important condition for the economic development of the country.

Sustainable development of the vocational education system in Georgia is supported by evidence-based policies and their implementation. Therefore, it is important for every step of the reform strategy to monitor, evaluate, and analyze information with the maximum capacity.

Planning of educational policy, in the wider concept, includes systematic and rational analysis, which is aimed at increasing its effectiveness and efficiency according to the needs and demands of the students and the public. Planning of education is based on the use of statistical data. It is important to analyze not only the data, telling us about a quantitative increase of educational opportunities but also in-depth information on micro-level – student-level.

In the process of implementing priorities declared in vocational education strategy, there have been various assessments, monitorings and researches conducted, but until now, there has not been any in-depth socio-economic analysis of the main beneficiaries of the programs (students) based on empirical data. This document is prepared with this aim. It shows information about the socio-economic qualities of vocational students and analyses the trends in the system.

Socio-economic status is used to measure an individual's or group's social position in society (Mukherjee, 1999). Different studies have shown that there is a strong connection between socio-

economic status and participation in education and further achievements (Bourdieu & Passeron 1977; Williams et al. 1980; Linke, Oertel & Kelsey 1985, 1988; Shavit & Blossfeld 1993; Graetz 1995; Birrell et al. 2000). Interestingly, most of the studies conducted about this topic in social sciences refer to the schools' education or higher education institutions. Not much attention has been paid to the vocational education field. Therefore, socio-economic analysis of vocational students is important for scientific reasons, as well as for planning effective educational policy. The following work is the first publication in Georgia which displays detailed and reliable data about the social and economic characteristics of a typical client of vocational education. The work also shows the main findings of the study and recommendations for implementers of vocational education.

Methodology

For the analysis of vocational students' socio-economic status, information from databases about vocational education provided by the LEPL Education Management Information System of Ministry of Education, Science, Culture, and Sport of Georgia at the beginning of 2020 was analyzed. This data was supplemented by various additional sources. Information about low socio-economic status families and individuals was requested from the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs of Georgia, the LEPL Social Service Agency. This agency is the only institution in the country that records data based on standardized assessments. Specifically, the record was made for every registrant for vocational education, vocational education students (for statuses active, dropped out and revoked), and graduate of vocational education, whether the individual or their family was registered in the database of low welfare families and receiving social insurance from the government. Additionally, to grasp the whole picture of the socio-economic status of vocational students and not be limited to a low socio-economic status group, a telephone survey was conducted. Results were generalized on the whole population of individuals involved in vocational education. Social statistical data of the National Statistics Office of Georgia were also used. Analyzing this information and its various characteristics made it possible to create a full-scale picture of the system. The research was based on a triangulation method: document analysis, primary information gathering, telephone survey, a meta-analysis of existing databases and research, etc. The analysis was made during the 2017-2019-year time cycles. Main focuses during the preparation of the report were:

- Social and economic characteristics of vocational education students;
- Characteristics of vocational education and main quantitative data;
- Data about the successful completion of vocational programs and awards of qualification;
- Success rates of vocational students in the labor market.

As was mentioned above, the main source of information for analyzing the socio-economic status of registrants, students, and graduates of vocational education were databases provided by LEPL Education Management Information System. Although, it needs mentioning that these databases do not provide information for full analysis of the socio-economic status of registered, enrolled, and

graduated individuals or those whose status is dropped out. Therefore, an additional telephone survey was conducted. The main goal of the research group was to aggregate data in a format, which would make it possible to analyze it from a socio-economic perspective.

Socio-economic Status

The main goal of this analytical document is to study the socio-economic status of vocational students; therefore, it is important to define what this term means.

There are different methods of stratifying society in the social sciences. There is no unified standard mechanism that would be used to define the socio-economic status of an individual or a family because the social position cannot be studied in isolation. Rather, it is defined by different economic, social, and physical characteristics of the environment where individuals work and live, as well as demographic and genetic factors (Ainley & Long, 1995). Socio-economic status is a social situation or class of an individual or a group, which is mainly defined by 3 factors:

- Education – High level of education is often associated with better economic results and broadening of social resources;
- Income – lack of income is connected to health detriments, mainly because of lack of access to products and services;
- Profession (social class) – besides financial benefits, employment might improve physical and mental health, broaden social networks.

Within this study, based on the specifics of the target group, 3 parameters were used to analyze socio-economic status: subjective self-assessment of socio-economic status, personal income, and family income.

Subjective self-assessment of socio-economic status is a proven method of having individuals place themselves on a scale, based on the criteria such as access to food and emergency products, finances, property. Subjective self-assessment scales are widely used to characterize groups when there are no other objective parameters of measurement. Data classifies surveyed people into 5 groups. Further analysis is required to define three socio-economic segments: low, middle, and high

Question: Please, indicate which of the following sentences describes socio-economic status of your family the best? (**Instructions:** Every version of possible answers is read to the respondent)

1. We barely have enough money for food	1. Low
2. We have enough money for food, but we have to save or borrow money to buy everyday clothes.	
3. We have enough money for food and everyday clothes, but we have to save or borrow money for expensive clothes, mobile phone or other electronics.	4. Middle
5. We have enough money for food, expensive clothes and electronics, but we have to save or borrow money to buy a car or a flat.	6. High
7. We can buy anything we want.	

8. I don't know/No answer

*Does not
participate in
analysis*

For further analysis, individual and family income data were gathered from respondents. Respondents openly provided their individual and family incomes in a month. In the next stage of analysis, both of the parameters were used to define low, middle, and high-income groups.

There are certain analytical limitations when defining socio-economic status in both of the cases – when judging based on subjective self-assessment or declared income. Subjective self-assessment is not based on uniformly objective criteria, even though the group descriptions are available for the individual. There are problems with defining status based on declared income when conducting small-scale, quick surveys – there is a large percentage of people who do not state their response (“I don't know/no answer”). At the same time, practice shows that respondents tend to state less income than they have.

Before the final socio-economic groups were defined, subjective self-assessment results were checked and corrected based on income data.

Prior and additional sample individuals were chosen randomly from registration databases of 2017-2019-year registrants, vocational education program students, and graduates. The survey was conducted by educational institution representatives. For the prior level, 1000 respondents were chosen for the sample.

Overview of Vocational Education and the Main Quantitative Indicators

For the analysis of vocational education system, quantitative data, such as the distribution of vocational program educational institutions, number of people interested in the vocational education (registrants), number of students on vocational education programs, number of dropped out students and graduation rates were analyzed in different aspects.

In the years 2018-2019, the number of institutions providing vocational education programs decreased. This mainly happened in municipalities, where there were several vocational education institutions. At the same time, the geographical access to institutions increased as existing vocational institutions opened their branches in the regions. New institutions were opened in municipalities, where there was no access to vocational education before. At the end of 2019 and the beginning of 2020, vocational education programs were accessible in 10 regions and 37 municipalities (including Tbilisi) of Georgia. State vocational education institutions are accessible in every region in Georgia, while private institutions do not cover small regions (Mtskheta-Mtianeti, Racha-Leckhumi and Kvemo Svaneti, Guria). For the beginning of 2020, there were 89 vocational education institutions in Georgia, 51 of them private and 38 – public.

During the years 2017-2019, an overall number of vocational programs declined, but this was mainly connected with the change of type of these programs. Subject-based programs were transformed into module-based programs and for part of the programs, a dual-based approach was implemented. This change was made with the intention to improve program quality and make it more adapted to the market requirements. Leading the list of a number of vocational institutions and programs, as well as acceptance quotas, is Tbilisi. Next, come Adjara and Kakheti.

Analysis of a number of main beneficiaries of vocational programs can provide data about the interest in vocational education in General. During the years 2017-2019, the number of registered students for the exams has been declining. In 2018, the number of registrants decreased by 11.9% compared to 2017. In 2019, 19,312 people were registered for vocational education programs; 79% out of these were registered in public institutions and 21% - in private.

Remarkably, 51% of registered applicants are male, which is disproportional to population distribution. Based on the vocational education institution's administrative structure, the percentage of males is higher in public institutions (up to 54%), when most of the registrants for private institutions are female (60%).

The age distribution shows that vocational education is most popular in 19-24 years age group – they comprise 48% of registrants in 2019 and the numbers show a small increase from year to year. Interestingly, in 2017-2019 years, increase also is evident in the students of 18 years old and younger. In 2017, only 3% of registrants were 18 years old and younger. In 2019, this number is up to 11% - one in ten registrants is 18 years old or younger.

It is important to note, that the percentage of accepted registrants every year is more or less stable (58%-60%). At the same time, number of accepted people to vocational programs decreases every year: 2017 - 16,570; 2018 – 12,726; 2019 – 11,528. From all students accepted to vocational programs in 2017-2019 years, 62-69% were accepted to public institutions. Every year, 0.5% of the population 15-years-old and younger are registered in vocational institutions. In population, aged 15-29, the percentage of people registered on vocational programs in 2019 was 1.3%. Within these, the percentage of males is slightly higher than in the case of registrants (52%). Age structure is similar to the dynamics of registrants – every second out of accepted students in 2019 was 19-24-years-old (50%), every 10th was 18-years-old or younger (10%).

According to the telephone survey, most of the registrants (31%), who were not accepted to vocational institutions, stated that the reason was lack of rating score. Another frequent reason was said to be the registrant's decision not to continue learning on the vocational program because of employment or family situation.

In the last three years, there have been 5 most popular programs in vocational education. In previous years, engineering was in the first place based on the number of registrants. In 2019, it was

replaced by business administration and law program. Based on the statistics, a similar trend is evident in enrolled students. Every year, engineering has the most students. In 2019, engineering, business administration, and law share the first place.

Within and outside of Georgia, a high level of students whose status was dropped out or terminated is a constant challenge. Analysis of data shows that 1/3 of students who were enrolled in 2018, had their student status dropped out by the first quarter of 2020. For the consequent cohorts (2018 and 2019 acceptances) the data is not yet accumulated (1 or 2 years have passed since they started learning), therefore, the data is analyzed based on the time passed since their acceptance. The similarity of these data with the same time frame data of different cohorts gives us the idea, that if everything stays the same, 2018-2019 cohort rates of dropped out/terminated status will be close to the rates of 2017.

Table #1. 2019 The main statistical data of individuals interested in vocational education programs in 2019

Regions	15+ Population Numbers	Number of Institutions		Number of registrants based on region and sex				Distribution of enrolled individuals based on region and sex (% from all registrants)			
		N	Distribution	N	%	Female %	Male %	N	%	Female %	Male %
Guria	96,700	1	1%	178	1%	54%	46%	123	69%	54%	46%
Mtskheta-Mtianeti	78,100	2	2%	314	2%	33%	67%	219	70%	35%	65%
Samtskhe-Javakheti	132,400	4	4%	600	3%	43%	57%	360	60%	36%	64%
Kvemo Kartli	328,400	5	5%	273	1%	70%	30%	187	68%	78%	22%
Kakheti	252,500	6	6%	669	3%	44%	56%	503	75%	46%	54%
Shida Kartli	213,000	6	6%	510	3%	59%	41%	312	61%	61%	39%
Samegrelo/Zemo Svaneti	274,200	7	7%	1,203	6%	50%	50%	787	65%	49%	51%
Imereti, Racha-Lechkh. /Kvemo Svaneti	455,900	14	13%	1,841	10%	42%	58%	842	46%	38%	62%
Adjara	273,000	14	13%	4,281	22%	38%	62%	2,820	66%	36%	64%
Tbilisi	930,100	48	45%	9,443	49%	55%	45%	5,375	57%	55%	45%
Total	3,034,300	107	100%	19,312	100%	49%	51%	11,528	60%	48%	52%

Source: The National Statistics Office of Georgia: The LEPL Education Management Information System

Table #2. Drop out status by cohorts

Year of enrollment	Time passed since enrollment to drop out			Total
	I Year	II Year	III Year	
2017	8%	17%	4%	29%
2018	8%	19%	-	27%
2019	7%	-	-	7%

Source: LEPL Education management information system

An in-depth analysis of the data shows, that the main reasons for becoming a dropped out student, are employment (34.3%) and family issues (17.1%), although male students also mention mandatory military service, which could explain a slightly higher drop out rate amongst males. It should also be noted, that the drop out status in public education facilities is significantly larger than in private facilities. Drop out status according to program types and teaching methods is also of note. Implementation of module-based programs became mandatory in 2016 and only two private institutions had admittance for subject-based programs, thus the data for 2017 provides the best basis for accurate analysis. In 2017, 26% of the students enrolled in subject-based VET programs (13,091 students) have dropped out, as well as 25% (72 students) enrolled in dual studies and 40% (3,407 students) enrolled in modular studies. The latter is a relatively high rate, which was probably caused by the increased learning hours for the modular programs, compared to the subject-based programs.

Analysis of graduate data shows, that despite the negative tendencies of registrants and enrolled students, the number of graduates in 2017-2019 years has not reduced: 10,058 students received a diploma for vocational education in 2019; 10,371 in 2018 and 9,132 in 2017. Among the alumni of vocational programs, men and women are represented fairly equally and the age distribution mirrors the enrollment indicator – most prevalent age group (47%) being 19-24, meanwhile, the number of graduates aged 18 and lower has been growing as well. It should also be noted, that 68% of vocational diplomas in 2019 have been issued by public institutions.

One of the most important goals in Georgia's vocational strategy is the quality assurance of vocational education. The active frame of the strategy encompasses essential components such as the analysis of vocational teachers and the companies, involved in practical components of the program. Competitiveness of the vocational program qualifications on the labor market heavily depends on the contents of the program, availability of practical knowledge, as well as the qualifications and the experience of teachers. The total number of teachers in vocational education institutions has increased within 2017-2019 years and reached 5,009 in 2019. The predominant part of them is female, with roughly 68% of teachers.

Based on the data provided by EMIS, among the teachers employed, 55% have a master's degree, 23% - bachelor's degree, and 13% of them have a doctor's degree. 9% of the teachers have received vocational education. As for the age distribution, a predominant share of teachers (25%) is within the ages of 48-58, followed by teachers within the ages of 37-47 (24%), with the smallest share (2%) being under 25 years old.

Inclusiveness of vocational education

Analysis of socio-economic status of students enrolled in vocational education system, based on the registry database

Inclusive education is an educational approach and idea, that ensures quality education for everyone. Creating an adequate learning space, that responds to everyone's individual needs is an important component of providing high-quality education for students, disregarding their age, sex, nationality, or special needs.

Behavioral analysis of representatives for vulnerable groups (people with disabilities, ethnic minorities, internally displaced people (IDP), socially vulnerable people) helps us observe, whether people from these groups fully benefit from the ability to receive vocational education and find appropriate employment, as well as find out whether the vocational education in Georgia can be defined as inclusive.

Information on socially vulnerable groups has been deduced based on the data received from the Ministry of internally displaced persons from the occupied territories, Labour health and Social Affairs of Georgia. The aforementioned data encompasses only the representatives of low socio-economic groups participating in the vocational education system defined by the government, thus it does not allow us to compare the data to middle and high socio-economic group representatives. The telephone survey, designed to address this "informational failure" and determine the needs for all socio-economic groups, will be addressed in a later sub-section.

In 2019, 12% (427,000 people) of the population has been described as socially vulnerable (persons having social status/appropriate rating score, recorded in the registry of vulnerable families), among which 7,223 people have shown interest in vocational education programs and registered for the exams. This number accounts for more than a third (37%) of registrants for the same year, a very clear indicator of the interest the aforementioned group has in vocational education.

Among the socially vulnerable registrants, the distribution of males and females is almost identical and this proportion shows no preference towards vocational education, based on sex. The majority of registrants, approximately 80% of them enroll in public vocational education institutions, while the remaining 20% enroll in private ones. This could be explained by the fact, that public education is fully financed by the government. Among the socially vulnerable, approximately 60% (more than half of the registrants) enroll in vocational education programs, each year. Although in Georgia, persons with social status, enrolled in vocational education institutions, only accounted for 1.5% of socially vulnerable people in years of 2017-2019.

If we look at the dropout rate, 7% of socially vulnerable students terminate their student status prematurely, which is a fairly low number. Additionally, according to a telephone survey, reasons for dropping out are not related to the content of the vocational program or the condition of the facility

(most claim that the reasons were becoming employed (suggestively in the informal sector), health, or family issues). Thus, we can assume that the conditions within the vocational education facilities are satisfactory for educational purposes. It is interesting, that these dynamics are very similar to the dynamics of those with no socially vulnerable status. Distribution of dropped out students is more apparent if we look at the data received from the telephone survey. Among dropped out students, 30% were from socially vulnerable groups. This indicator fully correlates with the distribution of socially vulnerable persons among those enrolled or registered – the number of socially vulnerable people enrolling or dropping out are both approximately one-third of all students. An in-depth analysis of the data received from the telephone survey showed, that the main reasons why socially vulnerable students prematurely terminate their student statuses are related to employment, family issues (e.g having a baby), and health issues (approximately 15.4% of surveyed).

The aforementioned data encompasses all persons enrolled in the vocational education system, that are registered in the database of socially vulnerable persons and have been evaluated with a corresponding rating score. Although, of the mentioned socially vulnerable groups, we can differentiate even smaller groups, namely – recipients of welfare (vulnerable welfare payment recipients). Socially vulnerable students who receive welfare include those, who have been issued monetary aid based on governmental decree #145 “Targeted social welfare”; the Rating score for such persons is lower than 100 001. The following table gives us information on welfare beneficiaries enrolled in vocational education

Table #3. Distribution of welfare beneficiary students by status in 2017-2019 (source: Education management information system)

Welfare beneficiary students	2017	2018	2019
Registrants	5,390	4,596	4,386
Percentage of all registrants	20%	20%	23%
Enrolled	3,374	2,580	2,370
Percentage of all enrolled	20%	20%	21%
Dropped out students	242	176	155
Percentage of dropped out of all dropped out students	17%	18%	19%
Percentage of dropped out students among enrolled	7%	7%	7%

A person with special educational needs (Special ed.) is a person, who has trouble with studies and needs a modified teaching plan and/or adapting to the educational facility and/or development and implementation of an individual teaching plan. Individuals with disabilities include people with physical, psychological, intellectual, or sensory disorders. Other things being equal, such conditions might

hinder a person’s ability to fully and efficiently take part in social life. Based on these definitions, it’s clear that accepting and accomodating facilities for persons with special needs and disabilities needs to be created, in order to make vocational education more accessible, which will allow such persons to gain education and employment.

The number of registrants with disabilities/special needs, as well as those socially vulnerable, has decreased by the year 2019 (807 cases in 2019, 1,258 in 2018). The Group of students with disabilities/special needs is mostly represented by man, with 55%-60%. As for the administrative data of vocational facilities, the number of such students in public education facilities predominantly outnumber those in private facilities – approximately 95% of such students register in public education facilities, annually. Other than financial reasons, this might also indicate, that public education facilities are more equipped with specialized technology and materials for persons with disabilities/special educational needs. The existence of an inclusive environment is one of the requirements for educational facility authorization, thus private facilities also have to adhere to these regulations. Although, the aforementioned fact might still indicate a higher level of inclusion with public education facilities. It should also be noted, that during the learning process, people with disabilities/special educational needs have access to additional services like transportation, assistant, etc. Discussing this topic based solely on numbers might be inaccurate, as public facilities have a higher quota and thus, resources to accept more students.

The graduates' dynamics of persons with disabilities/special needs indicates, that the number of students completing a diploma program is increasing. The successful completion level of vocational programs has increased to 70% by the year 2019.

Vulnerable social groups participating in the vocational education system also include internally displaced people (IDPs). The number of such persons enrolled has been decreasing over the years, they were the least represented group among the enrolled. Sex distribution among IDPs is indiscriminate, with males being the majority in 2017-2018 and most of the enrolled students being female in 2019. The situation remains the same, in regards to organizational issues, with the majority of displaced persons enrolling in public vocational education institutions and belonging to the age group of 19-24. Among the enrolled students of this group, the number of dropped out students vastly varies between years, with the biggest indicator of 23.5% in 2018, while the same indicator for 2017 was only 8%. It’s interesting, whether such statistics were caused by the inappropriate environment for a displaced person or other, outside factors. It should be noted, that the total number of displaced persons among the population of vocational students, in general, is very low.

Table #4. Inclusion of vulnerable groups in the vocational education system in 2019 (percentages indicated in regards to the whole group)

	Number of registrants		Number of enrolled students		Number of graduates	
	<i>N</i>	<i>% of the registrants</i>	<i>N</i>	<i>% of enrolled students</i>	<i>N</i>	<i>% of graduates</i>

Socially vulnerable	7,223	37%	4,100	36%	3,727	37%
Persons with special ed. needs/with disabilities	807	4.2%	565	4.9%	565	5.6%
IDPs	-	-	46	0.4%	40	0.4%

Source: Education management information system

Analysis of socio-economic status of vocational education students, based on the results of telephone survey

Analysis of the socio-economic status of vocational education students and registrants is mostly based on the information provided by the Education management information system (EMIS). The process of the analysis revealed the need for specific information, that could not be satisfied based on the available secondary information, thus a plan to conduct a survey was drafted.

For the purposes of analysis, the targeted population was divided into three socio-economic groups, based on a combination of subjective self-esteem and accumulated income of the family: low, middle, and high¹. The following analysis was based on these three groups.

The majority (37.3% of all registrants) of those registered for vocational programs and did not change their status and remained as a registrant, belong to the lower socio-economic group, (based on the telephone survey, reasons for not changing the status were mostly enough rating scores in the competition, current employment or family issues). The majority of registrants from all three socio-economic groups are from Tbilisi. Following table details the distribution of each socio-economic group by top regions. Registrants from the low socio-economic group, mostly come from Tbilisi, Adjara, Kakheti, and Samtskh-Javakheti regions.

Table #5. Distribution of surveyed socio-economic groups by regions

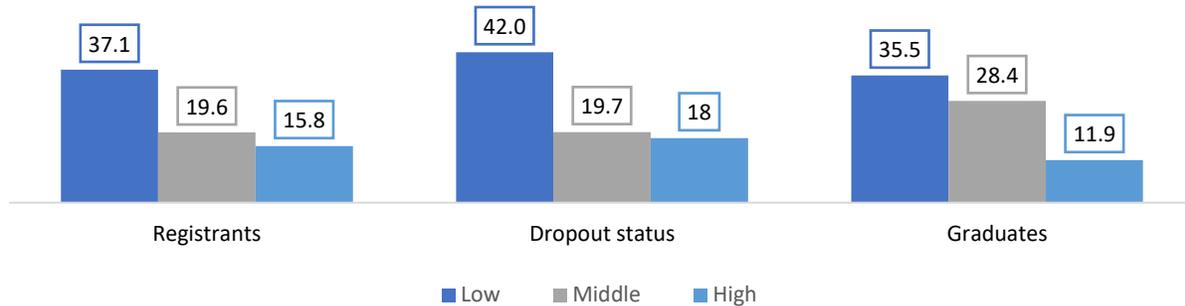
	Region				
	Tbilisi	Adjara	Kakheti	Shida Kartli	Samtskhe-Javakheti
High	65.2%	10.1%	5.7%	7.0%	2.5%
Middle	49.6%	19.0%	10.7%	1.2%	3.6%
Low	43.3%	23.8%	8.4%	3.8%	6.8%

Source: Telephone survey, ACT, April 2020.

It should be noted, that students from the low socio-economic group constitute the majority of those with terminated status (42%) and the alumni (35.5) (see diagram #1). This further highlights their higher representation in the vocational education system.

¹ Detailed methodology is described in the introduction part of the document.

Diagram #1: Distribution of vocational education program registrants (who could not or did not continue their studies, for various reasons and remained as registrants), enrolled students, those with dropout statuses and graduates across socio-economic groups



If we look at the reasons behind the premature termination of education, we will see that the students from the low socio-economic group, dropout mainly due to employment or family issues (getting married, having a child, etc.). As for the middle and high socio-economic groups, students also drop out due to studying in other educational institutions and employment (starting a job or increased work hours).

It is possible, for priority professional education fields to differ among different socio-economic groups. If we look at the data, we observe that students from the low socio-economic group more frequently choose agricultural sciences and art, students from the middle socio-economic group choose engineering and art, while students from the high socio-economic group mainly choose engineering and agricultural sciences. If we look at the more detailed distribution based on professions, accounting and informational technologies are prevalent in registrants from all three groups. Computer network administration, electricity, and web-interface development are among the top 5 professions of students from the high socio-economic group, while the aforementioned specialties are less prevalent among the other socio-economic groups.

Analysis of professional distribution based on socio-economic groups leads us to some important findings. Registrant from the low and middle socio-economic groups favor specialties, that are easier to learn and require less practical experience, while professions that are more sought-after on the labor market are popular with those from the high socio-economic group. Such professions also require more practical experience

Table #6. Percentage of popular specialties chosen by the registrants for vocational education programs, by socio-economic groups.

Top Specialties	1	2	3	4	5
Low	Sewing goods specialist (9.5%)	IT support (8.7%)	Cook (7.9%)	Culinary art (7.1%)	Accounting (5.6%)

Middle	IT support (14.9%)	Sewing goods specialist (7.8%)	Kindergarden teacher (6.5%)	Cook (5.4%)	Accounting (4 %)
High	Web-interface developer (10.2%)	IT support (10%)	Culinary art (8.1%)	Accounting (6.5%)	Electricity and computer network administrator (5.1%)

Source: Telephone survey, ACT, April 2020.

Examination of parent education levels is one of the components of socio-economic grouping, in the literature. It is interesting how the majority of parents of vocational students from the low socio-economic group do not have higher education – an indicator that changes for the middle and high socio-economic group. As for the preliminary education levels of registrants and students, before enrollment into vocational education programs, the majority has received secondary (12 grades) education (approximately 55% for all three groups).

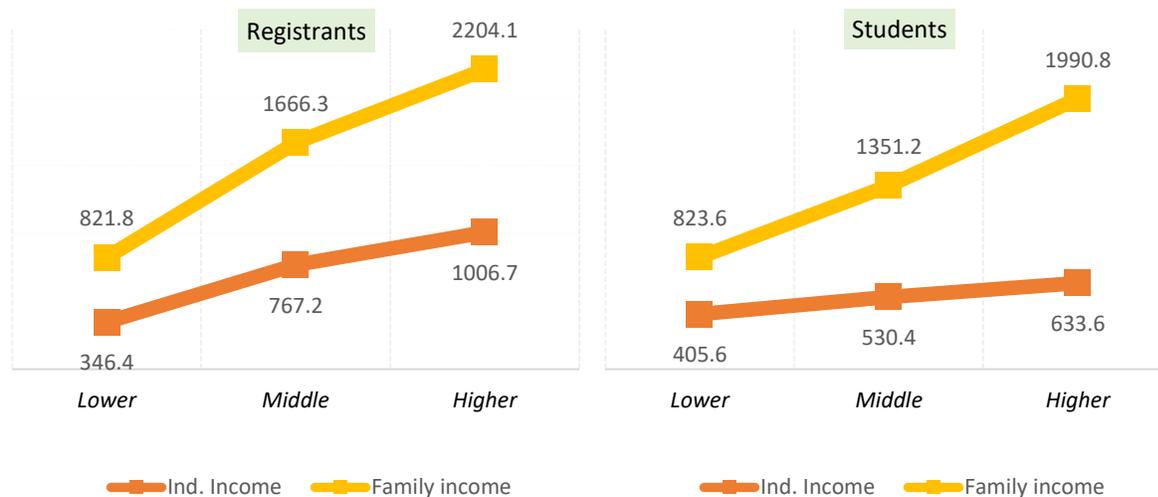
One of the tested approaches to evaluate those who participate in vocational education is examining their current activities within the lense of socio-economic groups. Is it noteworthy to observe the current occupation of those individuals who did not or could not become a student and remained as a registrant. Registrants from the low and middle socio-economic groups are mainly employed or unemployed, while those from the high socio-economic group are either employed or self-employed. Approximately 8% of the high and middle socio-economic group vocational students are also enrolled in higher educational institutions (8% of each group), while the same indicator is approximately 2.8% for the low socio-economic group. The majority of registrants from all three groups are employed in the private sector.

The majority of those surveyed from the low socio-economic group, name education in a vocational/higher educational institution, employment, or unemployment as their current activities. As for the middle and high socio-economic groups, studying in a vocational/higher educational institution and employment seem to be the prevalent activities. It is interesting, how the graduates of vocational programs use their attained knowledge and qualifications after graduating. For a majority of graduates from the low and middle socio-economic groups (52.3% and 54.8%, respectively), the acquired specialty is in full or partial correspondence with their current employment (partial correspondence was reported by 12.2% of alumni from the low socio-economic group and 12.9% by alumni from the middle socio-economic group). This indicator is very low for graduates from the high socio-economic group. 38.2% of such students have not used their vocational education at all for the current employment, while for the rest the VET education have partially or fully (38.3% and 16.5% respectively) contributed to their present occupation. This data highlights the importance of vocational education for students from the low and middle socio-economic groups. Proper vocational education most likely is a prerequisite for employment.

The average individual or family income of vocational education program registrants is a proper indicator for evaluation of the economical situation by socio-economic groups (See diagram #2). Data analysis shows that representatives of the low socio-economic group have higher chances to receive more average individual income if they finish their vocational education. This tendency is less

prevalent for representatives of the middle and high socio-economic groups. Receiving vocational education holds no additional benefit for them and even without such education, they can gain more average individual income..

Diagram #2. The average individual and family incomes (GEL) of surveyed by socio-economic groups.



Note: "Registrants" includes only students who remained as registrants, i.e those who could not become students for various reasons; "Students" includes those who are active students, as well as the alumni and those with terminated statuses.

Recommendations

Analyzing the vocational education system and socio-economic status of vocational students has allowed us to underline the main tendencies of the system and develop various recommendations. The report shows how responsive the vocational education system is to the challenges of the field and whether vocational education is accessible and inclusive of all members of society. Correspondence between the labor market and vocational education, the relationship between sorting the main beneficiaries of vocational education by socio-economic groups and their other characteristics is one of the main discussion points of this report. Following recommendations were developed for those involved with educational policies, based on the results of the survey and findings:

- ✓ The LEPL Education management information system should document demographic and socio-economic characteristics (achieved highest education, employment, income, education level of parents) of those involved in the vocational education system – registrants, students (dropped out students as well as graduates). Additionally, it would be preferable not to have multiple entries for the same person in the database (more than one, duplicated) and for all the information to be presented in a standartized form.
- Information in the database should be constantly updated, for said information to be usable;

A guide to information database should be created, which would include detailed description of each field, as well as main principles of data entry, erasure, aggregation and account presentation;

- ✓ In order to improve **geographical accessibility** of vocational education, it is important to improve the educational network, especially in the mostly populated regions of Georgian, such as Tbilisi, Imereti, Kvemo Kartli and Adjara;
- ✓ The majority of vocational education beneficiaries are representatives of the low socio-economic group and they predominantly study in public educational institutions. It is important to **ensure accessibility of education** by increasing the number of public vocational education institutions or developing a financing plan for private ones.
- ✓ It is important to **develop and implement communication strategy for vocational education program** – raising awareness of vocational education will cause increased interest towards vocational education as a future career among the beneficiaries. This will increase the number of enrolled students and decrease the percentage of those who remain as registrants and do not change their status due to various reasons.
- ✓ In order to decrease the amount of students listed as registrants and increase the amount of enrolled students, it is important to employ several mechanisms to benefit the interests of such people – active communication with all registrants, starting at the registration level, as well as provision of information regarding the fields that they regard with higher priority, introduction to the educational institution environment and increasing their motivation, so they continue studying after passing the examinations. It is important to provide students with a flexible educational process, as well as the ability to balance between working and studying, ability to solve the mandatory military service problem for males;
- ✓ **In order to increase enrollment rates for young students, as well as the ones from the low socio-economic group**, it would be beneficial to give them higher coefficient scores during exams, so that such groups do not miss out on education as they are the primary beneficiaries of vocational education;
- ✓ **Development of student-oriented services and programs, encouraging career planning and realization system** is one of the main methods to decrease the number of dropouts and raising interest of young students in vocational education;

- ✓ It is important to **increase the integrated programs** for students of 15-19 age group. This will allow them to integrate secondary education with vocational studies and receive a higher qualification.
- ✓ In order to ensure compliance with the requirements of the vocational education and the labor market, it is necessary to develop **the labor market analysis system** that periodically records the professions in demand in the labor market and adapts them to existing programs; Nowadays, there are some fields within the vocational programs that are not competitive on the market, which is proven by lower employment rates of graduates of those programs. Although this analysis is not comprehensive and is based on various research from different institutions, which were not formalized;
- ✓ **Promotion of inclusion of the private sector** within vocational education ensures the formation of desirable specialities, development of programs for them and employment of the graduates. Increasing the scale of dual programs will promote employment rate and growth of entrepreneurship. For the time being, percentage of dual programs in vocational education programs are very low in relation with other types of programs;
- ✓ Research has shown that distribution of jobs varies based on the socio-economic groups, thus it is important to prioritize the encouragement of the low and middle socio-economic groups to partake in vocational education and optimize the programs for them, as vocational education increases the probability of gaining employment for those groups, as opposed to those from the high socio-economic group.

Aside from educational services, conducting research on other supportive services will let us determine the barrier of entry into vocational education for lower socio-economic groups; This might include food or transportation problems, language barriers, etc. Such studies will ensure the development of vocational programs for the aforementioned socio-economic groups