

# Assessing the State of Vocational Education and Training in Hanoi: A Comprehensive Study on Institutions, Enterprises, and Employee Perspectives

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**Abstract:** *The purpose of this study is to analyze and assess the current situation of Vocational Education and Training (VET) activities in Hanoi and the level of meeting the demand for VET of enterprises. The questionnaire survey method is applied to 3 target groups including VET institutions, enterprises and employees. Study to identify the current status of training results of SOE institutions, assess the level of meeting the demand of enterprises for employees who have undergone VET, there-by making recommendations on the direction of proposing solutions to develop VET for Hanoi in the coming years.*

**Keywords:** Vocational Education and Training, Technical and Vocational Education and Training (TVET), Employees, Enterprises, Students

## 1. Introduction

VET in Vietnam in general and Hanoi in particular in recent years has made positive changes. The quality of VET has gradually been improved, better meeting the needs and requirements of enterprises and the labor market. The proportion of learners after graduating from VET institutions with jobs is getting higher and higher. Some training professions in colleges of Hanoi have approached regional and international levels, highly appreciated by businesses. However, VET in the whole country and Hanoi still has many limitations and inadequacies. The scale and structure of training are still quite unreasonable, there is much lack at the college level. The quality of training has not been as expected by businesses and society. Workers undergoing VET are weak in technical and other soft skills; The sense of discipline and industrial manners is not good. These are limitations, if there is no solution, it will affect the quality of human resources of Vietnam in general and Hanoi in particular, affecting the competitiveness of enterprises in the area.

However, in order to clearly see the substance of the problem, it is necessary to have multidimensional assessments through secondary data and practical survey data. Therefore, in order to have orientations and solutions for VET of Hanoi until 2030, the research team conducted a survey of a number of SOE institutions, enterprises and workers in Hanoi. This article presents the actual survey results, through which it is possible to see the "picture" of the current situation of VET in Hanoi.

## 2. Methodology and Procedures

### *Purpose of the survey*

Analyze and assess the current situation of VET activities in SOE institutions in Hanoi and the level of meeting the demand for employers through VET of enterprises. The survey results are the basis for proposing solutions to develop VET in Hanoi until 2030.

### *Survey methodology*

The survey uses qualitative and quantitative methods, combined with questionnaires.

Quantitative methods are used to collect information about the number of workers, names and quantities of new skills, assess how well they meet the needs of businesses, etc.

Qualitative methods (face-to-face interviews at enterprises or online interviews or telephone interviews) to collect information about trends, expected future demand for skills of enterprises as well as development orientations of vocational education institutions...

### *Survey Scope*

The research team conducted a survey of vocational education institutions, businesses and workers in Hanoi:

- 1) The current situation of using labor through VET of enterprises in Hanoi, the enterprise's assessment of the level of response of labor through VET to the needs of enterprises, the demand for employing labor through VET in the coming time (according to the quantity, structure, industry, profession,...),...
- 2) Technical qualifications of employees through VET (training lines, professions, training levels), income, working hours, job position, demand for training/retraining; assessment of school training and other related matters; the level of competency/skill fulfillment for the current job,...

- 3) Scale of training, training lines of vocational education institutions, percentage of trainees having jobs after training; facilities, equipment, training programs and curricula of vocational education institutions, cooperation situation with enterprises,

#### Survey Form

- The research team surveyed 60 enterprises employing 100 or more workers.
- The research team questioned 360 workers working at the above-mentioned enterprises.
- The research team randomly selected 50 vocational education institutions: vocational education centers, intermediate schools and colleges.

### 3. Results

#### 3.1 An Overview of the Development of Vocational Education in Hanoi from 2011 to 2022

As of June 30, 2023, there will be 360 vocational education institutions in Hanoi, an increase of 93 compared to 2011. In which, divided by form of ownership, there are: 112 public establishments, 248 non-public establishments; Divided by type of institution, there are: 224 vocational education institutions (including: 68 colleges, 83 intermediate schools, 77 vocational/vocational education centers) and 132 enterprises and other types.

The enrollment results of VET at vocational education institutions in the city also continuously increased, from 140,500 arrivals in 2011 to 252,286 arrivals in 2022 (an increase of 79.56% over the whole period). In the period of 2011 – 2022, vocational education institutions in the city enrollment reached 2,268,642 people. In which: college level: 233,832 people, accounting for 10.31%; intermediate level: 278,209 people, accounting for 12.26%; Elementary level and less than 3 months: 1,756,601 people, accounting for 77,743. On average, about 189,054 people receive VET each year; There are 1,824,142 students and graduates, of which: college level: 138,861 people, intermediate level: 180,177 people, beginner level and less than 3 months: 1,505,103 people.

Implementing Decision No. 1956/QD-TTg of the Prime Minister, contributing to labor restructuring, improving labor productivity, creating jobs and improving living standards for rural people, from 2011 to 2020 in Hanoi city, training has been organized for 217,571 people (agricultural occupation 112,910 people, accounted for 51.9%; non-agricultural occupations 104,661 people, accounting for 48.1%); created post-training jobs for 169,909 people/212,859 people who completed their studies; the employment rate of post-apprenticeship workers reached over 79.8%, of which: Enterprises recruited and consumed 35,359 people, accounting for 20.8%; self-employed 132,068 people, accounting for 77.7%; establishment of cooperative groups, production groups, cooperatives and enterprises with 2,482 people, accounting for 1.5%. The increasing quality of skilled rural labor has promoted production development, increased labor productivity, shifted labor structure, contributed to poverty reduction, met

the requirements of industrialization and modernization of agriculture and rural areas in the city.

Also in the period of 2011-2022, there are nearly 7,000 times of enterprises cooperating with vocational education departments in the city with the following cooperation contents: Receiving nearly 232,126 students to practice and practice at enterprises; Enterprises participate in developing and editing 2,051 sets of programs and curricula in college, intermediate and elementary training systems; Enterprises engaged in teaching 829 professions; Nearly 3,000 enterprises ordered training with 125,638 people; Enterprises recruited immediately after graduation about nearly 1,000,000 people; In addition, the enterprise also supports equipment, raw materials, funds for facilities during the training process.

The rate of students, students and trainees having jobs after graduation reaches 70-80%. Many professions when students graduate are 100% recruited by businesses such as Air Conditioning and Air Conditioning Engineering, Electrical and Electronic Engineering, automotive painting technology, automotive technology, automation... making an important contribution to raising the proportion of trained workers of the City increased from 41% in 2011 to 72.23% in 2022 (up 31.23%), of which the proportion of workers with certificates increased from 30.8% in 2011 to 52.5% in 2022 (up 21.7%), contributing to the supply of trained labor resources, skilled and high quality for the Capital's labor market.

As of December 31, 2022, there are 12,882 teachers and administrators working in vocational education institutions in the city. In which: There are 10,781 teachers, including 5,135 teachers in colleges, 1,369 teachers in intermediate schools, 4,277 teachers in vocational education centers and other establishments; Divided by professional qualifications: 3,909 people with postgraduate degrees, 4,402 people with university degrees, 1,039 people with college degrees and 1,451 people with intermediate/intermediate vocational degrees and other qualifications; There are 2,101 vocational education managers, of which: 1,207 people have postgraduate degrees, 781 people have university degrees, 113 people have intermediate, college and other qualifications. The training and fostering of teachers and vocational education administrators is focused on annually by vocational education institutions. Basically, the team of vocational educators with professional qualifications and pedagogical skills all meet the prescribed standards.

In the period of 2011 - 2022, Hanoi City has organized training, fostering and improving qualifications for nearly 5,000 teachers, of which: 243 teachers of public vocational schools in the city participated in vocational skills improvement training courses, of which 85 teachers were trained by foreign experts, improve skills in the Automotive Technology profession; Welding, Industrial Electricity, Industrial Electronics and 03 teachers trained and fostered in Finland for Industrial Electronics; Every year, the Department of Labor, War Invalids and Social Affairs has organized fostering and training for teachers and teachers of Political and Legal Education subjects of VET institutions.

3.2 Survey results at Vocational Education Institutions

Of the total 50 SOE institutions surveyed, 25 (accounting for 50%) public SOE institutions and 25 private SOE institutions (accounting for 50%). By managing agency, there are 26 (accounting for 52%) SOE establishments under the Hanoi People's Committee, 13 (accounting for 26%) SOE establishments under ministries and sectors and 11 (accounting for 22%) SOE establishments belonging to corporations and corporations. By school type, there are 25

(50%) colleges, 16 (32%) intermediate schools and 9 (18%) VET centers.

From the enrollment results at 50 VET institutions surveyed in Hanoi in the period of 2019 – 2022 (Figure 1), the number of enrollment at intermediate and college levels tends to increase every year, this upward trend is expected that in 2023, VET institutions will continue to increase at these 2 training levels.

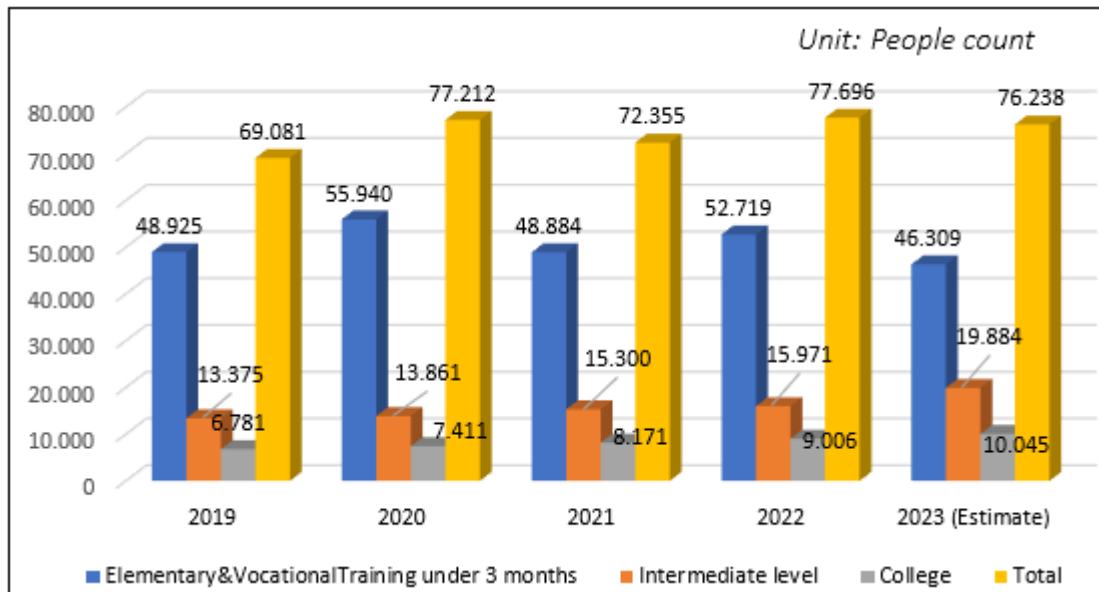


Figure 1: Number of enrollments according to the level of training of SOE institutions in the period 2019-2022

Source: Research Team Survey

The graduation results in Figure 2 show that the number of students graduating increases and decreases depending on the year, accordingly, compared to 2019, the number of

students graduating in 2020 and 2022 increases, but in 2021 it is only equivalent to 2019.

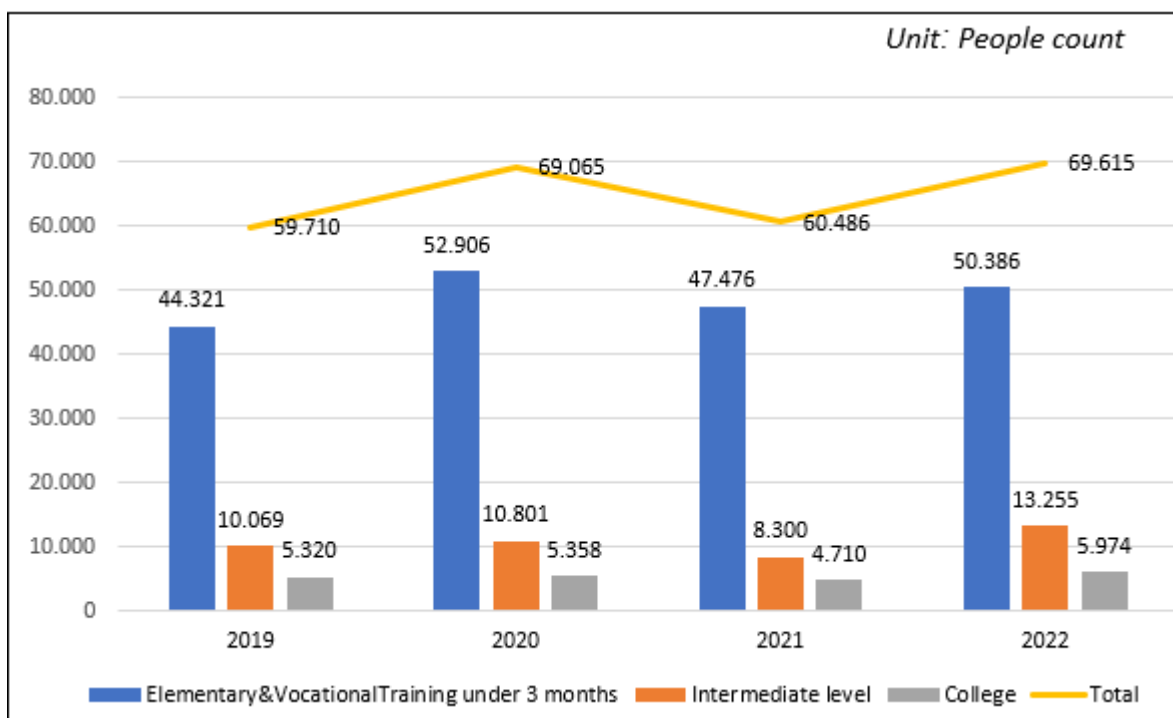


Figure 2: Number of graduates according to the level of training of SOE institutions in the period 2019-2022

Source: Research Team Survey

Reference to the enrollment results (figure 1) shows that there is a relatively large number of non-graduating students, specifically: Comparing the enrollment results in 2019 and the graduation results in 2021 of the intermediate level, there are 5,075 non-graduated students (accounting for 37.9% of the total number of students enrolled); Similarly, at the college level, 2,071 students (30.5%) did not graduate in 2022 compared to the entrance results in 2019.

The reason for this situation, VET institutions believe that due to the strong impact of the Covid 19 pandemic taking place at the time of the 2021-2022 school year, VET institutions must temporarily dismiss students from school in accordance with the regulations of the National COVID Prevention and Control Steering Committee. Another reason is that some students study for 1 time, after which they change training careers or drop out.

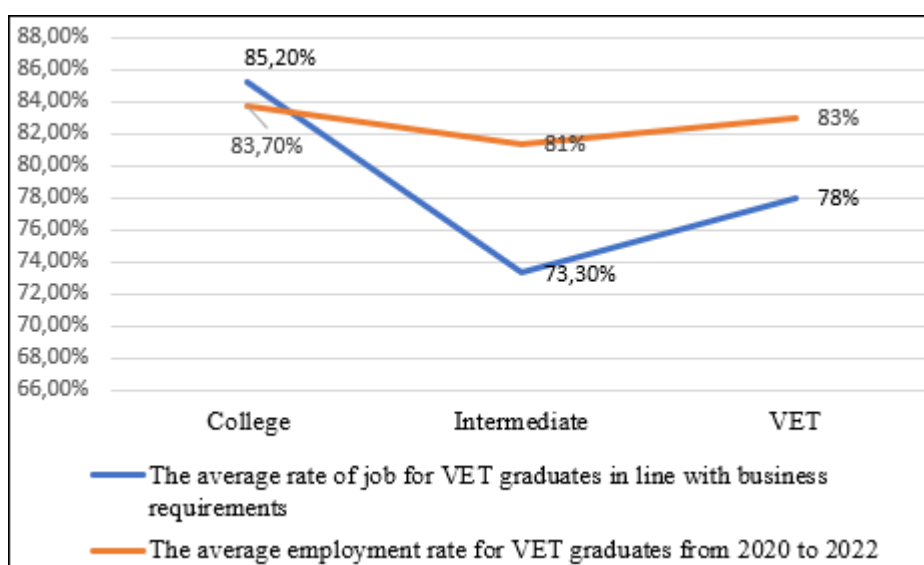
According to the assessment of VET institutions (Figure 3), the average percentage of graduates (SVTNs) in VET

institutions with jobs in 2020-2022 is 82.4%. In which, the employment rate of students in colleges is 83.7%, intermediate schools are 81%, and vocational education centers are 83%. Some occupations are considered by VET institutions to be easy to find jobs such as:

- Air conditioning and air conditioning engineering
- Electrical and Electronic Engineering, Mechatronics
- E-commerce
- Automotive technology
- Food processing techniques
- Beauty care
- Freight Logistics

Besides, there are also some warehouse jobs to find jobs such as:

- Accounting, finance and banking
- Environmental technology
- Industrial sewing
- Medicine



**Figure 3:** Student's employment rate and level of meeting business needs after graduation.

Source: Research Team Survey

The results from Figure 3 also show that VET institutions rate the level of meeting enterprises' requirements for students at colleges is quite high with an average rate of 85.2% meeting the requirements, students at intermediate schools and VET centers have an average rate of meeting business requirements respectively: 73.3% and 78%.

The survey results also show that VET institutions attach great importance to cooperation activities with enterprises in the process of organizing training, of which 72% are regularly cooperating. SOE institutions also have many forms of cooperation with enterprises. However, the main and frequently applied forms of cooperation by VET institutions include:

- Receive and guide trainees to internship enterprises;
- Participate in the development of training curricula and outcome standards; industry list, list of training equipment;
- Linking training organizations with SOE institutions

- Exchange information on human resource supply and demand.

About teachers: Through the survey results of 50 VET institutions in the area, there are currently 15 institutions lacking teachers and focusing on the following professions: electronic engineering, mechanics, restaurant services. The survey results also showed that 76% of teachers annually come to practice at enterprises and about 50% of teachers practice at enterprises with internship time from 10-30 days, followed by less than 10 days (accounting for 34.2%), the rest over 30 days (accounting for 15.8%).

Regarding facilities and equipment for training: Compared with the standards of the list of vocational education equipment, 45/50 establishments (90%) ensure equipment in both quantity and quality, and 5/50 establishments (10%) have some professions that do not ensure the quantity and quality of equipment in training. Some equipment jobs are lacking and the quality is not guaranteed such as:

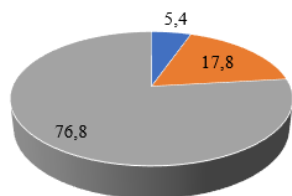


Construction technology technology, hotel restaurant services, air-conditioning engineering, automotive technology, IT ...

### 2.3 Survey results at enterprises

Out of a total of 60 surveyed enterprises in Hanoi city are currently operating in the field of education and training; agriculture, forestry and fisheries; production and distribution of electricity - gas - hot water - steam and air conditioning; Transportation and warehousing. In which, joint stock companies accounted for 58.3%, followed by limited liability companies with 25%, private enterprises accounted for 10%, enterprises with 100% foreign invested capital accounted for 5%, and state-owned enterprises accounted for 1.7%.

The survey results show that the proportion of workers with intermediate or higher ID qualifications accounts for the highest proportion (76.8%), followed by workers with primary education and VET of less than 3 months (accounting for 17.8%), only 5.4% are workers without ID card (Figure 4).



- Untrained Labor
- Trained Labor (Elementary, under 3 months)
- Trained Labor (Intermediate, and above)

Figure 4: Labor divided according to ID level

Source: Research Team Survey

Enterprises highly appreciate the level of meeting the needs of enterprises for employees after graduation at SOE institutions, specifically: 81.3% of employees are assessed by enterprises at the level from meeting to good professional capacity and 88.3% of employees meet the requirements of occupational safety skills occupational health (figure 5).

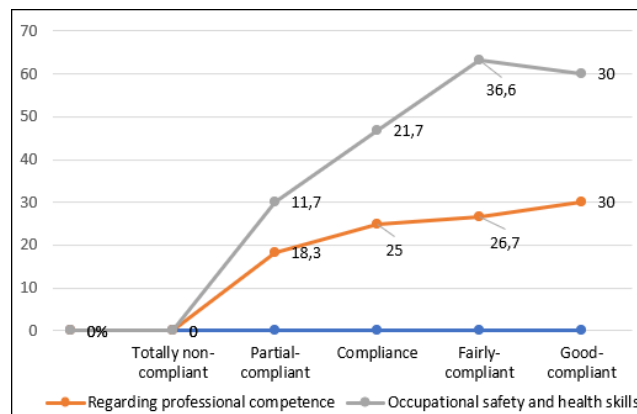


Figure 5: Labor divided according to ID level

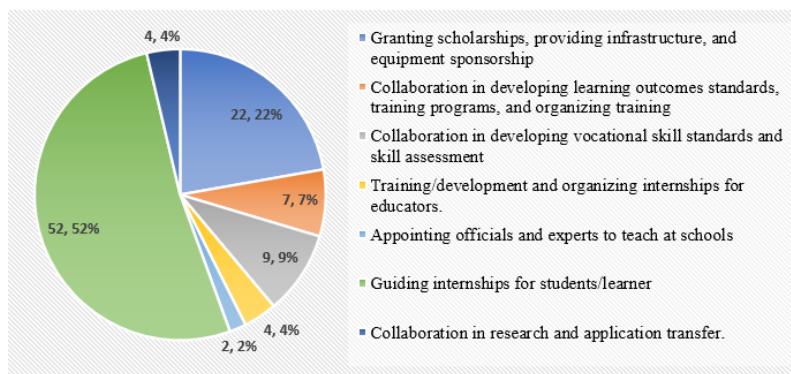
Source: Research Team Survey

According to the survey results, the average salary that enterprises pay employees with college degrees is 8.9 million VND/month, intermediate level is 7.3 million VND/month, elementary level, VET less than 3 months and no ID card are paid by enterprises with an average salary of 6.4 million VND/month and 5.4 million VND/month, respectively.

Some businesses (accounting for about 18% of the total number of surveyed enterprises) face difficulties in recruitment. The reason identified by these enterprises is that in Hanoi there are not enough workers through VET in the field that the enterprise needs to use or the enterprise's regime has not attracted workers.

Enterprises are also very active, proactive and apply many forms of cooperation with SOE institutions in training to improve the capacity of employees. In which, the most common form of cooperation is receiving and guiding trainees to practice at enterprises (52%). This was followed by scholarships, grants for facilities and equipment (22%), as detailed in Figure 6.

### 2.4 Forms of co-operation between enterprises and VET institutions



Source: Research Team Survey

### 2.5. Survey results of employees at enterprises

Among the 360 employees in the surveyed enterprises, the gender of male is 189 people (52.5%), female is 171 people

(47.5%). Most workers graduated from high school with 351 people (accounting for 97.5%), only 9 people (accounting for 2.5%) workers graduated from secondary school. In which, employees with college degrees or higher accounted

mainly for 302 people (accounting for 83.9%); There were 41 people with intermediate education (11.4%), only 17 people (4.7%) had vocational primary education and other VET programs.

The survey results show that 306 workers (accounting for 85% of the total surveyed workers find that their current job

is suitable and very suitable for the trained profession and only 54 workers (accounting for 15%) find their current job normal and less suitable for the trained profession. Employees find jobs in many different forms, the most common of which is through labor recruitment announcements at enterprises (figure 7).

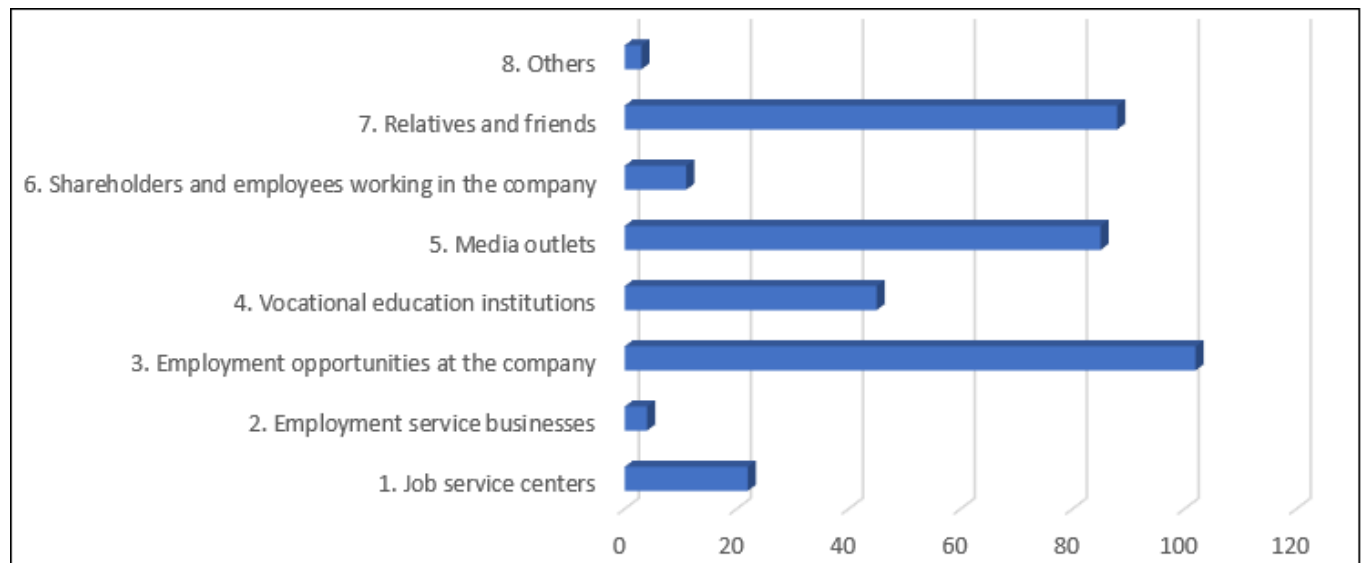


Figure 7: Form of job search of employees

Source: Research Team Survey

As analyzed, most workers find that the trained profession is suitable for the current job. However, employees still have the desire to be trained and improve their capacity in professional skills as well as soft skills such as teamwork, communication, understanding, presentation, time management, planning... Employees also want training that is tied to production practices and increased practice time. At the same time, employees proposed to have better policies and regimes to encourage and create favorable conditions for employees to participate in capacity building training courses.

## 4. Conclusion and Recommendations

The survey results show:

### 4.1 The demand for intermediate and college studies in Hanoi tends to increase

Except for 2021 (due to the negative impact of the COVID Pandemic), the number of intermediate and college level enrollment at VET institutions increased. This shows that the demand for training at these 2 levels in Hanoi City is tending to increase.

### 4.2 The number of students who do not graduate is high

Comparing enrollment and graduation results corresponding to the training year of each level, it shows that at the level, 37.9% of the total number of students enrolled did not graduate in 2021. Similarly, at the college level, 30.5% of all students enrolled did not graduate in 2022. Although there are many objective and subjective reasons to explain this

situation. However, the non-graduation rate at these 2 levels is high and needs a solution.

### 4.3 The rate of students after graduation and the level of meeting the needs of businesses is quite high

At all levels of vocational education training, there is a employment rate after graduation of over 80%. The level of meeting the needs of businesses is rated highest for the college level and the lowest for the intermediate level. This shows that there is a need for solutions to improve the level of meeting the needs of businesses, especially for the intermediate level.

### 4.4 Teachers are still lacking in some training professions in some schools

Teachers are one of the factors determining the quality of training, but in fact, 15/50 vocational education institutions lack teachers in some training professions. This shows that Hanoi City needs solutions to attract human resources and train human resources to provide enough VET teachers for the city.

### 4.5 Take initiative and have many forms of connection between vocational education institutions and enterprises in VET

Vocational education institutions and enterprises have been proactive and have many forms of cohesion in the process of VET for students as well as fostering capacity building for employees. However, common cohesive forms are still traditional forms. Therefore, in order to improve the level of meeting the needs of businesses, vocational education

institutions need to have a more suitable, open and flexible cohesive model to adapt to the context of industry 4.0 as well as the pace of change of enterprises and the labor market.

#### 4.6 Employees with training degrees from intermediate level or higher are highly employed by the labor market of Hanoi City

The survey results show that businesses in Hanoi employ mainly intermediate or higher qualifications. This suggests that Hanoi's SOE management agency as well as VET institutions in Hanoi need to focus on training and improving the quality of training for 2 intermediate and college levels.

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