

Comparative Analysis of Vocational Training Methods Applied within Organizations

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Abstract

This scientific approach addresses the issue of applying vocational training methods to adults. Organizations, through the policy that they promote in this domain, may apply various methods of vocational training or require to the educational service providers to use certain methods, considered more effective for employees. As information technologies have developed, new opportunities and challenges have emerged, as well as limitations for certain organizations regarding the use of training methods. Due to the costs involved in some training methods, organizations are moving towards those methods that involve lower costs, even if they are not the most efficient ones. Depending on the professional knowledge and skills to be transmitted, the most appropriate training methods are chosen.

In order to evaluate the training methods applied by organizations, we used the results of the Continuing Vocational Training Survey applied in organizations in EU Member States. This allowed us to identify similarities and differences, from one country to another, regarding the application of vocational training methods.

Keywords: *learning, vocational training, training methods, continuing vocational training, adult training.*

JEL classification: J44; L25; M53.

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1. Introduction

Vocational training is an activity of human resources management that has direct implications both on organizational performance and on its competitive advantage. Today, more than ever, the employees and organizations need to gain knowledge continually in order to remain competitive (Sheikh; 2008). At the same time, the employees need to be aware that their current level of knowledge, skills or competences, as well as their current attitude and behaviour, need to be improved in order for their professional activity to give them satisfaction in the future (Armstrong; 2003, pp. 494).

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In order to achieve the training objectives, it is important to take into account several aspects: the training methods, the place of training, teaching techniques, the time given to training, the learning context, etc. Although, there are several aspects that ensure the efficiency of the training process, in this paper we will focus more on the training methods. The organizations, on the one hand, and the trainers, on the other hand, can apply a multitude of training methods, separately or by combining them, in order to achieve the training objectives. Currently, we cannot mention a method as the most effective one in the training process. Moreover, the economic crisis caused by the COVID-19 pandemic, has shifted training to the online environment. In the last year, it has moved from traditional training methods to distance training methods, each having advantages and disadvantages.

Training is important and necessary, but it is also expensive. Like any other activity, organizations should seek to maximize the return on this investment, so that training to be as effective as possible (Read, Kleiner; 1996). In order for the training to be considered effective, it is important that the employee, in the post-training period, to realize what he has been trained to do and that the benefits of the training to outweigh the costs. In these conditions, the training methods applied are of particular importance on the effectiveness of the training. At the same time, it should be mentioned that it is difficult to identify which training method is more effective. There are a number of other variables that can influence training and that we must take into account when choosing the training method. According to Sims (1990), the nature of the material to be presented, the number of people to be trained, the experience and competence of the instructors, the type and quantity of equipment available, the time spent on training and the results pursued - all must be taken into account when identifying the best method for a particular training program.

2. Research methodology

The analysis performed on the present scientific approach demonstrates that there are a multitude of methods of training employees. The methods mentioned above can be applied in the process of training employees according to the objectives pursued. Further, we will analyse the training methods reflected in the Continuing Vocational Training Survey conducted at the level of the European Union, at an interval of 5 years. The latest results of the Continuing Vocational Training Survey are from 2015. In this context, the results of the application of training methods are presented both at EU level and for each Member State. Also, in the process of analysing the training methods, the place of the training was taken into account, as well as whether the training is related to the workplace or not.

3. The venue of vocational training

On-the-job training, regardless of the method applied, can be performed by managers, team leaders, trainers or mentors. On-the-job training is more informal and can be applied immediately. The advantage of on-the-job training is that, the employee works, learns and at the same time, gains professional experience.

Off-the-job training can be realized both within and outside the organization. Within the organization, the training is carried out in equipped training spaces or centers, and as trainers can be both the employees of the organization and specialists within the organizations providing educational services. Outside the organization, the training is realized at the headquarters of educational service providers and aims to develop professional knowledge and skills. Off-the-job training, as well as on-the-job training, is carried out, mostly, through vocational training courses, being applied several methods, at the same time. Table 1 shows the share of organizations offering training courses, either inside or outside the organization.

The share of organizations offering vocational training courses in 2015, %

Table 1

Countries	Total CVT courses	Place of vocational training courses	
		CVT courses - internal	CVT courses - external
EU – 27	60.2	34.3	54.1
Austria	81.6	56.1	69.1
Belgium	78.4	54.5	70.4
Bulgaria	31.9	22.7	20.2
Czechia	89.4	51.2	79.4
Cyprus	52.1	17.5	47.8
Croatia	42.7	19.5	37.1
Denmark	69.9	46.4	56.7
Estonia	64.4	46.2	60.2
Finland	78.0	44.1	73.5
France	75.1	37.7	68.8
Germany	61.9	49.7	55.8
Greece	12.7	7.9	9.4
Ireland	57.1	42.3	48.6
Italy	52.3	26.4	46.8
Latvia	31.3	20.1	24.7
Lithuania	43.7	22.6	39.3
Luxemburg	71.9	53.1	62.3
Malta	43.3	29.9	34.7
Netherlands	75.5	41.8	69.6
Poland	29.2	18.0	24.9
Portugal	53.8	28.0	45.9
Romania	21.1	12.6	14.9
Slovakia	72.9	39.4	57.4

Countries	Total CVT courses	Place of vocational training courses	
		CVT courses - internal	CVT courses - external
Slovenia	63.6	45.7	64.0
Spain	80.6	13.6	78.6
Sweden	81.6	66.8	74.8
Hungary	32.1	19.2	27.1

Source: Processed by authors based on statistical data of the European Union.

Analysing the information in Table 1, we can note that, organizations in all EU Member States are concerned with the vocational training of their employees. At EU level, 60.2% of organizations offer vocational training courses for employees. Evaluating at the level of each country, we notice that organizations in some countries prefer vocational training courses more, compared to those in other countries. Therefore, we grouped the countries into four categories:

- countries where more than 75% of organizations offer training courses – Austria, Belgium, Czechia, Finland, France, Netherlands, Spain and Sweden;
- countries where 50-75% of organizations offer training courses – Cyprus, Denmark, Estonia, Germany, Ireland, Italy, Luxemburg, Portugal, Slovakia and Slovenia;
- countries where 20-50% of organizations offer training courses – Bulgaria, Croatia, Latvia, Lithuania, Malta, Poland and Hungary;
- countries where less than 25% of organizations offer training courses – Greece and Romania.

Analysing by the venue of vocational training courses, we notice that mostly, they take place outside the organization, with the exception of Bulgaria. Simultaneously, we find that organizations in Cyprus and Spain give higher priority to vocational training courses realized outside the organization, compared to those inside it. Thus, in Cyprus, the share of organizations pleading for vocational training courses abroad is 2.7 times higher than those inside. In Spain, the preferences of organizations for training courses organized abroad are 5.7 times higher than those inside. This can also be explained by the fact that small and medium-sized organizations do not have the appropriate infrastructure to conduct training within the organization. Therefore, the share of organizations opting for vocational training courses outside the organization is higher in EU Member States.

4. On-the-job training

On-the-job training is the most commonly used method by organizations and can often be informal. Still in the year 1964, G. Becher noted the important role of on-the-job training. (The human capital: a theoretical and empirical analysis). Barron and others. (1997) consider that there are two key aspects of on-the-job training. The first aspect is that on-the-job training is perceived as an

investment in the human capital. Like any investment, it involves initial costs. In the case of on-the-job training, the costs are determined by the time allotted by the worker to acquire the new professional skills that will generate a higher productivity, as well as costs related to the equipment or materials needed for the training. The second aspect of on-the-job training is what distinguishes between "general" and "specific" training. While "general" training increases employee productivity not only in the organization in which it operates, but also in other organizations, "specific" training leads to increased productivity only in the organization in which it operates. Some authors have analysed the effectiveness of on-the-job training, at the same time, highlighting the reasons for organizations to apply this method of training (Blanchard, Thacker, 1998; Van der Klink, Streumer, 2002). Workplace training has also been analysed in terms of the size of the organization (Holtmann, Idson; 1991), as well as in terms of the connection with new technologies and turnover (Greenhalgh, Mavrotas; 1996).

On-the-job training takes place by applying several methods. Among on-the-job training methods, direct on-the-job training or on-the-job guidance is one of the most commonly used vocational training methods by organizations in EU member states. At the same time, it should be noted that the larger the organization, the more frequently this method is applied. Table 2 presents the information regarding the level of application of this method in EU Member States, in general and by categories of organizations (small, medium and large) according to the number of employees.

**Level of application of direct on-the-job training in organizations
in EU Member States**

Table 2
%

Countries	Total enterprises	Inclusive		
		Enterprises with 10-49 employees	Enterprises with 50-249 employees	Enterprises with 250 and more employees
EU – 27	41.2	36.7	57.6	75.1
Austria	48.7	45.6	60.9	79.8
Belgium	47.8	41.7	69.7	90.8
Bulgaria	28.8	26.0	37.4	60.4
Czechia	26.6	22.1	38.0	58.8
Cyprus	37.4	32.8	58.8	83.7
Croatia	27.8	23.6	42.0	58.7
Denmark	45.5	41.4	54.0	77.6
Estonia	65.7	63.9	72.2	84.6
Finland	44.6	39.0	65.0	82.8
France	23.5	21.2	34.0	42.6
Germany	64.3	58.2	78.9	93.6
Greece	10.5	9.4	16.4	32.7
Ireland	59.5	55.7	75.7	89.2
Italy	28.0	24.6	50.9	74.2

Countries	Total enterprises	Inclusive		
		Enterprises with 10-49 employees	Enterprises with 50-249 employees	Enterprises with 250 and more employees
Latvia	99.9	99.9	100.0	100.0
Lithuania	36.3	31.7	53.2	75.9
Luxemburg	52.6	45.9	75.5	90.4
Malta	49.7	43.5	68.5	93.7
Netherlands	50.9	47.0	58.8	82.1
Poland	31.7	26.5	48.4	71.8
Portugal	57.7	54.1	75.6	86.1
Romania	13.0	9.5	20.4	44.1
Slovakia	33.3	28.1	50.6	63.3
Slovenia	59.2	56.5	68.9	82.1
Spain	47.1	43.7	64.4	79.2
Sweden	73.1	70.1	86.1	95.2
Hungary	21.3	17.9	32.0	58.6

Source: Processed by the author based on statistical data of the European Union.

From Table 2, we see that direct on-the-job training is applied, more or less, in all EU Member States. If in Greek organizations this method is applied by 10.5% of organizations, in Latvia - by 99.9%. Analysing the level of application of this method depending on the size of the organization, we find that the share of small organizations in the total number of organizations of the same size is lower than at EU level. If at EU level this method is applied by 41.2% of all organizations, then in the case of small organizations, that method is applied only by 36.7% of organizations of the same category. Regarding the application of this method in large organizations, their share is 2 times higher than in small organizations, in the most of EU countries.

Another method of on-the-job training is job rotation. Job rotation can be seen as a mechanism because it allows the organization to notice employees working in different positions and therefore to identify the jobs that best suit the employee (Ortega; 2001). Job rotation was researched as a method of motivating and increasing the employee skills (Cheraskin, Campion; 1996). The same authors argue that job rotation has several benefits: increasing employee morale, improving productivity, increasing the level of employee retention, training opportunities and the ability to enhance career development (Gittleman and others; 1998). From an ergonomic point of view, the goal of the job rotation is not only to train employees, but also to minimize the biomechanical stress accumulated on a certain part of the body by all employees (the accumulated biomechanical loading on a particular body part for all workers (Jorgensen and others; 2005). Job rotation is defined as the organized movement of an employee from one position to another in the same organizational subdivision in a given period (Malinski, 2002). Also, the job rotation involves the occasional change of employees from one designated job to another that requires new skills and responsibilities, as well as other expertise

(Langton, Robbins, Judge; 2012). In the case of territorially dispersed organizations, the secondment can also be seen as on-the-job training. According to the Continuing Vocational Training Survey realized in EU Member States, organizations use both the job rotation and the secondment as on-the-job training methods (Figure 1).

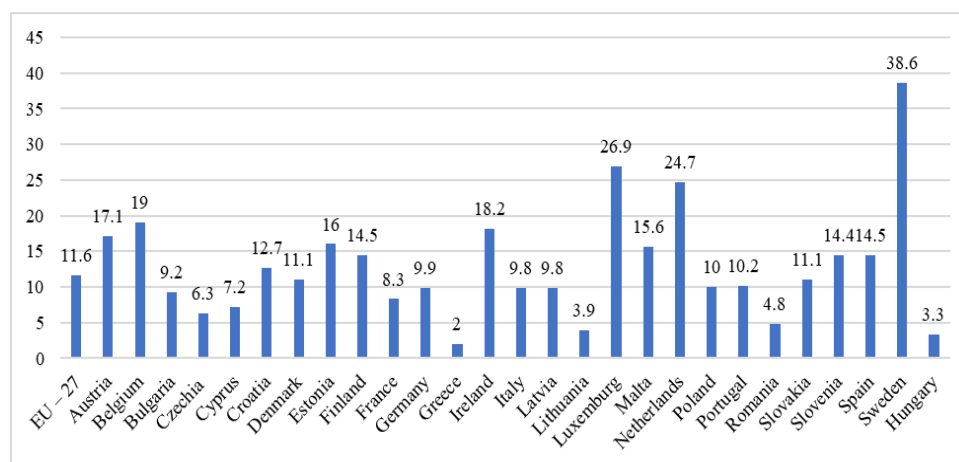


Figure 1. Staff training by job rotation and secondments in EU Member States, %
Source: Processed by authors based on statistical data of the European Union.

According to Figure 1, 11.6% of EU Member States' organizations apply job rotation and secondment in employees training. The relatively small share of organizations that apply job rotation and the secondment can be determined by the fact that they are more characteristic for large organizations. However, the share of large organizations in the total number of organizations is insignificant compared to that of small and medium-sized organizations. Most commonly, these methods are used by organizations in Sweden (38.6%) and Luxembourg (26.9%) and the Netherlands (24.7%). At the opposite pole are the organizations from Greece (2%), Hungary (3.3%), Lithuania (3.9%) and Romania (4.8%).

5. Off-the-job training

Off-the-job training is realized by applying several methods. The use of one or another method depends on the skills to be acquired, the specifics of the work tasks performed by the job holder, the information and knowledge to be acquired, etc. There are a multitude of training methods outside the workplace: case study, games-based training, lectures, debates, simulation, role-playing, scheduled training, team buildings, workshops, etc. The case study gives to the participants the opportunity to develop their skills by presenting a problem, without a solution, for solving it, or with a solution, as an example of how to solve it (Elam, Spotts; 2004). In the case of game-based training, the learners compete in a range of decision-making tasks that allow them to explore a variety of strategic

alternatives and experience the consequences that affect other players, but without risks for the individuals or organizations (Brown; 2004). According to Armstrong (2003), the lectures are used to transmit information with systematized content and staggered over time. Simulation training involves the use of a simulator in which specific skills are developed through repeated practices, with a multisensory experience of imitated conditions (Kneebone; 2003). The interpretation of a role starts from the fact that the participants use a scenario that suggests a certain situation and assumes the roles of some characters within it (Armstrong; 2003). While workshops are realized with the participation of a group of people to examine, under the guidance of a facilitator, certain aspects of the organization's work (Armstrong; 2003), team buildings are organized either to improve mutual knowledge within a team, or to develop skills specific to team members (Wheelan; 2005).

Some of the methods presented above can also be found in the Continuing Vocational Training Questionnaire applied at EU level. Figure 2 shows the methods of collective learning. Most commonly, the methods in Figure 2 are used to train managerial and specialized staff.

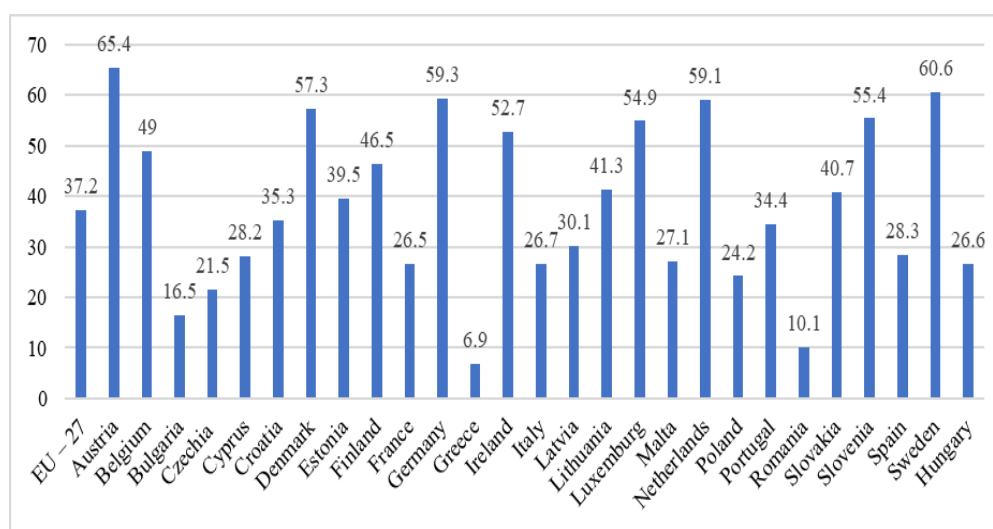


Figure 2. Training by participation at conferences, workshops, trade fairs and lectures
Source: Processed by the authors based on statistical data of the European Union.

At EU level, the methods shown in Figure 2 are applied by more than 1/3 of the organizations of EU member states. At the same time, we notice that these methods are applied in more than 50% of organizations in such countries as Austria, Denmark, Germany, Ireland, Luxembourg, the Netherlands, Slovenia and Sweden. At the same time, we find that less than 10% of organizations in Greece use these training methods. In Romania, these methods are used in the training process of 10.1% of organizations.

Quality circles represent another training method used by EU Member States' organizations (Figure 3).

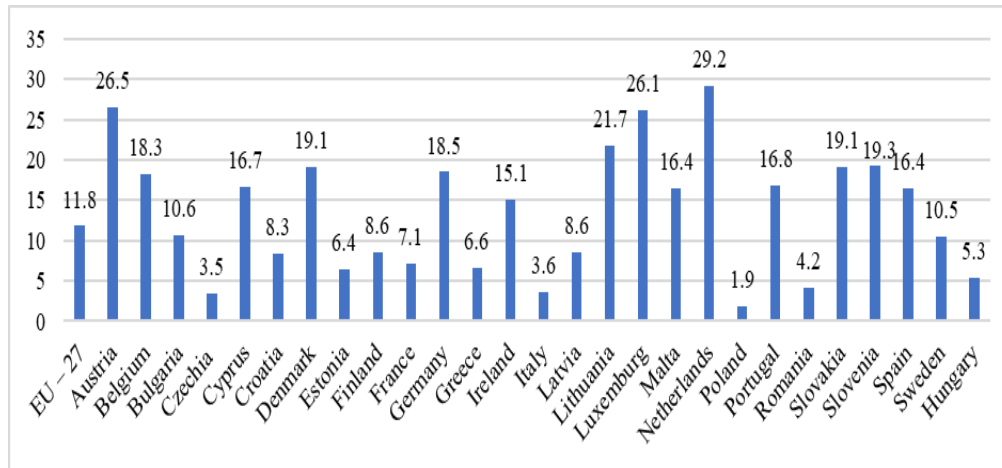


Figure 3. Training by participation at quality circles, %

Source: Processed by authors based on statistical data of the European Union.

Compared to previous training methods applied by EU Member States' organizations, training through participation in quality circles is less used. In only three EU Member States (Austria, Luxembourg and the Netherlands), this method is applied in more than a quarter of organizations. At the same time, in some countries such as the Czech Republic, Italy, Poland and Romania, quality circles, as a training method, is applied in less than 5% of organizations, regardless of their size.

Self-directed learning is another method of training applied by organizations. Self-directed learning, according to Ellinger, is an extremely effective method of training adult learners. Self-learning is also seen as a method of lifelong learning (Boyer and others; 2013). Some research has suggested that individuals who have developed high self-directed learning skills tend to work better in jobs that require a high degree of problem-solving ability, creativity, and adaptation to change (Beitler; 2005). As individuals develop self-directed learning skills, they tend to become more self-confident and able to solve problems individually (Guglielmino, Murdick; 1997). Straka (2000) identified ten main enhancers of self-directed learning in the workplace, namely: continuous improvement, involvement of individuals, taking personal responsibility, harmonious values, exemplary leadership, difference assessment, communication, risk-taking, team work and innovation. Figure 4 shows information regarding the level of application of self-directed learning in organizations in EU Member States.

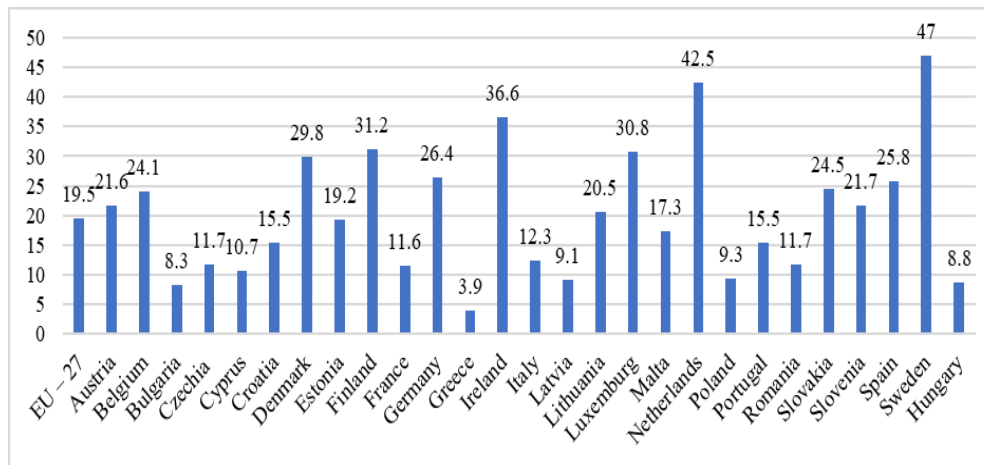


Figure 4. Self-directed learning in EU Member States, %
Source: Processed by the author based on statistical data of the European Union.

From Figure 4 we see that self-directed learning is most commonly applied in organizations from Sweden (47.0%), followed by the Netherlands (42.5%) and Ireland (36.6%). At the same time, we find that this method is applied in less than 10% of organizations in such countries as Bulgaria, Greece, Latvia, Poland and Hungary.

6. Conclusion

Training methods play a significant role in ensuring the efficiency of the learning process. The organizations can apply a variety of vocational training methods, taking into account several aspects: the volume of material to be transmitted, the specifics of knowledge, the value of students, the skills of instructors, etc. The application of one or other methods depends on the size of the organization. Small organizations are more restricted in their choice of training methods, in comparison with large organizations that have more alternatives in the training process. The informal nature of on-the-job training is oriented towards certain methods of vocational training, while off-the-job training offers the possibility of applying a variety of training methods.

The Continuing Vocational Training Questionnaire, applied in EU Member States, focuses more on traditional methods of vocational training. With the development of the knowledge-based economy, when knowledge is the resource that can influence the activity of the organization, and the training is done much more frequently, there is a tendency of organizations to diversify training methods. Likewise, the development of information technologies offers new opportunities and challenges, at the same time, regarding the activity of adult learning. These, in turn, will influence even more the training methods applied by the organizations.

At the same time, distance learning contributes to changing the content of the employee training methods.

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