RETURN ON INVESTMENT OF WORK-BASED LEARNING AND APPRENTICESHIPS

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Abstract - The meaning and goal of any learning whereby a person exercises his or her particular human right of acquiring education, along with other human rights, is to strengthen theirhuman capacities and foster their development. In learning, it is the process of cultivation that should take place, which becomes the most effective only in the atmosphere of cooperation, mutual understanding and the joint effort of the interested parties, society and state, or more broadly understood, the global community. Work-based learning is being increasingly recognised and accepted. Organisations realise that learning in the workplace has a crucial significance regarding organisational success. The paper presented pertains to work-based learning as one of the forms that allow a closer connection betweenvocational education and training (VET) and practical working life. It puts forward the results of a research study aimed at the explanation of the motivation of SMEsfor the introduction of work-based learning(WBL) as well as the factors that encourage or prevent broader engagement of enterprises in WBL. The research study was conductedin sixEU Member States in 2018.

Keywords - Work-based learning, motivation, SMEs.

I. INTRODUCTION

Unemployment remains one of the critical indicators of the economic potential of a country. High youth unemployment rates, in particular, do not only mean a waste ofhumanpotential but, at the same time, pose a threat to the long-term economic development of a particular country due to low revenues, low demands, and a GDP decrease. Youthunemployment in EU-28 in March 2018 was extremelyhigh. The highest unemployment rate was reported from Greece (42.3%), followed by Spain (35%), Italy (31.7%), whilst the lowest rateswere recorded in Germany (6.1%), the Czech Republic (6.8%), and the Netherlands (7%) (STATISTA, 2018). It means that the disparities of youth unemployment in EU areall too apparent (Gontkovičováet al., 2014). The relative behaviour of youth unemployment across countries is highly associated with the relative performance of the educational system (Ghoshray et al., 2017). One of the ways to tackle youth unemployment is to offer them a decent education, reflecting the current needs of the labour market in a specific country. Undoubtedly, it is necessary to seek ways to provide learners with as much opportunity as possible to learn in a real-work environment. Practical on-the-job training and workplace experience provided by employers give graduates better chances of employment and facilitates their transition to the labour market.Greater cost-effectiveness of this type of learning is also undeniable as, thanks to the leaps-and-bounds technological advancement of recent decades, it is virtually impossible to ensure sufficient and adequate technical equipment and qualified professionals capable of using the latest technologies for vocational schools in many areas.Moreover, it is always important to remember that trainingactivities should not be aimed at preparing graduates for a particular employer, but their future jobs in general. The efforts to establish acloser connection of vocational training and work practice led to the introduction of the so-called dual education.In such a learning process, practical vocationaltraining takes place directly with a specific employer during the entire training period. However, it has been proved thatthe dual education is not a „cure-all" system, and it cannot be applied to all learning and training programmes. This expectation would be even unreal as neither the countries with the well-established dual education system like Austria and Germany organise practical training solely in the workplace. Even there, part of training is heldin"training centres" where again, it is impossible to break away from WBL – work-based learning, i.e. the learning in the real-work environment (or frequently referred to as learning by doing).

II. WORK-BASED LEARNING IN EUROPE

The concept ofwork-based learning is usedin relation to special education programmes and studycourses created by schools and universities in close collaboration with businesses. These study programmes aim to provide learners with possibilities of learning directly in the workplace. Such programmes are focused on learner needs, contribute to the long-term development of organisations, and are formallyaccredited/officially recognised. Some key features of various definitions of work-based learning lie in the fact that learning is based on the very scope of employment and is learner-oriented (Clarke et al., 2003). Work-based learning is a form of learning that combines theory and practice, and knowledge and experience. WBL assumes that the workplace offers as many opportunities for learning as a regular classroom, and the learning process contains an element of real-work experience (Raelin, 2008). Work-based learning programmes

usuallycomprise six fundamental characteristics, namely a) a partnership between an external organisation and an educational institution,set up to support learning and established by a formal contract between this educational institution and another organisation; b) learners/apprentices engaged in WBLbeing employees or having a specific form of employment contract with this external organisation; c) WBL programmes seeking mainly to satisfy learner needs and providing the necessary work-related activities;

d) learners starting WBL programmes at various levels depending on their initial skills, previous qualifications and experience; e) the essential part of WBL happening inthe workplace, thus making it possible forWBL to focus on work-related activities and future needs of both learners and organisations; f) the educational establishment evaluating the learning outputs of the agreed programmes, regarding the framework standards while taking the interdisciplinary character of the WBL programme into consideration.

WBL should bring benefits to the organisation, but it must also meet the requirements placed on the educational provider so that the education provided is a guarantee for the acquisitionof an officially recognised qualification (Boud at al., 2001). Work-related learning is offered in a wide range of courses in higher education and is more and more commonly regarded as a significant part of undergraduate and graduate study (Brodie et al., 2007). Emphasis is also placed on its role in supporting some industrial sectors and the development of local and national economies, as well as the development of infrastructure and learnerskills (Atkins, 1999). In Europe, the European Commission distinguishes between three work-related learning models.

These models are used in different European countries. The first model is apprenticeships. This model is typically known in Germany and Austria as the dual model or the“dual system” of education. It is based on the integration of companies and educational institutions in providing vocational education and training. During such programmes learners spend a great deal of time on training in companies.In parallel, they also gain general and occupation-related knowledge in VETschools or other similar education/ traininginstitutions.

Another work-based learning model is school-based VET that includes on-the-job training periods in companies, chiefly in the form of internships, work placements or traineeships that are incorporated as a compulsory or optional element of VET programmes. They can be of varying duration; however,usually represent no longer than 50% of the training programme duration (frequently, only around 25-30% or even less). They are primarily intended to facilitate the transition of the young generation from education to employment, offering them a chance to familiarise with the world of the work environment. In some countries, these WBL programmesare a prerequisite for the successful formal completion of a VET programme.

Finally, the last WBL model is integratedinto school-based educational programmes through on-site laboratories, workshops, kitchens, restaurants, junior or practice companies, simulations or real business or industry project assignments. The aim is to create “real-life” working environments, make business contacts, establish cooperation with real businesses or clients, and to develop entrepreneurial competences. In this model, schools andtraining centres are responsible for the creation of close to real life working environments. VET schools are equipped with school facilities that serve as workshops, laboratories, kitchens, and restaurants,or they cooperate with business and industry to use their facilities. Many European countries combine all three general WBL models (European Commission, 2013).

III. METODOLOGY

The SMEs decision to engage in the supply of WBL and apprenticeship training is determined by the cost-benefit ratio of such an investment. In order to define how to motivate and engage SMEs in the provision of WBL and apprenticeships, research focused on the SMEs perception of a WBL value was conductedin six EU countries (Bulgaria, Greece, Italy, Portugal, Slovakia and Spain) from January toMarch2018.

The focus groups in Slovakia, Greece, Italy, Bulgaria, Portugal and Spain were organised in January 2018. Representatives of different types of organisations such as big multinational companies, acting as forerunners of dual education, SMEs, organisations supporting WBL, VET providers, trainers, and students took part in the focus groups. Based on the findings of the focus groups, a methodology for quantitative research was developed, and a questionnaire survey carried out in Slovakia, Greece, Italy, Bulgaria, Portugal and Spain in February and March 2018. A total of 120 companies were studied. Most of them were from the category of small and medium-sized enterprises. The enterprises operate in a variety of sectors;for example, automotive, accommodation, boarding, electrotechnical industry, food industry, transportation, metallurgical and chemical industry, and retail trade. Most of the enterprises that participated in the survey are certified to provide dual education, WBL, or specific forms of alternance training such as apprenticeships. Respondents were asked to answer several questions, most of them on a 1-7 point Likert scale (see Table 1). Afterwards, the median values, mode values and IQR (inter-quartile range) valueswere calculated.

Table 1 Assigned points according to the Likert scale

Strongly disagree	1
Disagree	2
Somewhat disagree	3
Neither agree nor disagree	4
Somewhat agree	5
Agree	6
Strongly agree	7

Table 2 shows the numbers of respondents by country

Country	Number of respondents
Bulgaria	20
Greece	29
Italy	20
Portugal	11
Slovakia	20
Spain	20
Total	120

Table 2 Numbers of respondents by country

IV. RESULTS AND DISCUSSION

The essential SMEs-related costs and benefits related to WBL have been identified. The costs mostly include the wages of apprentices in the form of regular or irregular payments, compensations for any living expenditure; training costs such as training personnel and supplies' costs; recruitment and administrative costs including financial and capital costs; quality costs as the remedy of mistakes'costs, quality assurance costs, infrastructure costs, and other costs like fees, duties, and taxes. The SMEs-related benefits consist mainly of the value of apprentices' productive work for both skilled and unskilled tasks, a higher productivity percentage during the apprenticeship period,the growth in the firm's reputation expressed as an increase in the number of local/regional/national clients, positive customer's feedback, saved hiring costs, and training subsidies. The society-related benefits, which SMEs have no knowledge of, have also been considered; for example, the increased local/regional/national employment rate, increased local/regional/national youth employment rate, social inclusion of vulnerable categories, economic returns inthe reduction of public expenditure in VET, wage returns expressed as higher apprentices' wages compared to non-apprentices' ones,the acquisition of hard and soft skills by apprentices, facilitation in the school-to-work transition, increased entrepreneurship among young people, better quality of work, improved professional status and career development among young people, and better job satisfaction. The qualitative research shows that there are very similar definitions of work-based learning and apprenticeships in all participating countries. In all countries, WBL and apprenticeships are associated with the practical training of students in companies. However, there are differences concerning the way of implementing the WBL policies, the national framework and the level of development of WBL and apprenticeships.Support measures, the main benefits of work-based learning and the obstacles to it,the costs associated and also its social valuesare discussed below.

According to the respondents from all countries participating in the focus groups, the best ways how to enhance WBL and apprenticeshipsfor SMEs are to a) provide economic benefits like subsidies/tax advantages for SMEs; b) relieve bureaucracy; c)improve funding structures for WBL and apprenticeships; d) establish better cooperation between VET schools and SMEs; e) engage the government inthe coverage of expenses; f) motivate enterprises so that they invest in WBL; g) bring inmore regulations concerning quality assurance and monitoring of practical training in enterprises; h) increaseSMEs awareness of WBL, and i) raise the status of certificates for WBL students.

The benefits ofactive work-based learningare plentiful, notablyin thea) apprentices´ development of craftsmanship and preparedness for professional life: theytake lessons in practice, make mistakes, fix them and generally, improve their skills and competences; b) better cooperation between VET schools and training centres; c) decrease in the skills miss-match; d) increase in the number of job opportunities; i) enhancement of the quality of VET programme offer; j) improvement of language skills, especially if enterprises open up to the world; k) intergenerational exchange; l) better match between the needs of employers and employees' skills; m) potential for graduates to learn specificskills and better careers prospects; n) faster integration of learners into work teams; o) apprentices´ development of work habits and working discipline;and, last but not least, in thep) supply of well-prepared future workers. The main obstacles for active work-based learninginclude a) a gap in the creation of curricula for WBL and VET; b) the insufficient learner supervision and monitoring; c) a lack of financial resources; d) excessive bureaucracy and documentation; e) the constantly changing legislation; f) sometimes undesirable or detrimental parental involvement; g) a lack of interest of secondary schools in dual education; h) poorly prepared school graduates. The research revealed some measures that should be implemented to improve the work-based learning. The most important iscooperationwith social partners for new national legislation, and cooperationat different levels of governance. The main costs associated with WBL consist ofthe trainees´ wages and salaries, and their social and health insurance contributions,the wages and salaries of supervisors and trainers, material costs,time costs,recruitment costs, and the costs ofpromoting dual education, and marketing and advertisingcosts. Most of the participants in the focus groups from all countries agreed that there is a lack of structures in the system of communication and

cooperation between VET and companies. The participants also said that they lack support for enterprises that provide apprenticeships for disadvantaged groups or a lack of information in this area. Also, according to the focus groups participants, businesses are not sufficiently motivated and supported to assign qualified trainers and tutors to their apprentices in all countries except Bulgaria and Spain. The focus groups participants understooda "social value/social impact/SROI" asthe way it influences SMEs, learners and companies in general, as the employability of graduates and the increase of their social and professional skills and competences,more social cohesion between the different actors involved,and the intergenerational exchange. They regarded asocial value as a value that cannot be expressed in financial terms, social benefits as employees´ loyalty, and Corporate Social Responsibility of a company involved in WBL as a contribution to its better image. The focus groups participants pointed out that in some countries the current system is scarcely available to SMEs and it is necessary to understand why their efforts to engage in the system are mostly unsuccessful. The key problem is the low willingness of schools, learners and their parents, both for financial and attitude reasons. Apart from SMEs, it would be necessary to understand the attitudes of schools and learners better and to raise awareness of the benefits of WBL as well as apprenticeships and vocational training as a whole to all stakeholders potentially involved (SME, schools, VET providers, students, parents and such).

CONCLUSIONS

Besides the changes that result from WBL and apprenticeships, the significance of the impact of every ROI indicator should be better understood. It would be interesting to investigate if, after the WBL experience, SMEs create feedback loops with educational institutions to address the market needs and shape thesubjects they offer and the methodology teaching thesein order to close the skills gap. Also, it would be useful to explore the importance of social skills forcompanies and how they can be increased through a WBL experience. Finally, it would be useful to learn how organisations and enterprises evaluate whether, after the completion of the WBL programme, the apprentices and trainees have reached the objective of their learning agreement stipulated at the beginning. It was pointed out that the following problems exist:a) not enough information provided by the career guidance centres;b) not enough control over the quality of training provided by the vocational training centres for adults;c) not enough activity from the side of businesses to ensureWBL opportunities;d) not available information about learners involved in practical training in companies, as well as the assessment ofthe quality achieved. Further research should concentrate on the evaluation of the companies' perception of the most visible aspects of apprenticeships, and also broader considerations that they may not have taken into account the social and longer-term impact of apprenticeship training. It isalso essentialto explore the global knowledge of existing facilities and support for apprenticeships (legal, logistical, practical, financial, educational and others), and to evaluate what would be required in each aspect to facilitate apprenticeships in businesses further. The evaluation of the multiple (immediate and long-term) social returns (for the wider economy, society, education, young people, employment,andnational prosperity), and the availability of staff (if/how many/with what confidence) to train apprentices in companiesare crucial as well.

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