

STRATEGIC DEVELOPMENT OF HIGHER EDUCATION ACCORDING TO THE NEEDS OF EMPLOYERS - DUAL HIGHER EDUCATION IN MONTENEGRO AS A RESPONSE TO THE CHALLENGES OF MODERN EDUCATION

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Abstract: *The modern business environment, which is characterized by global competition and rapid changes, requires continuous adaptation from the company. At the same time, this imposes on the employees the need for continuous improvement and acquisition of new knowledge and skills, which enable them to have the necessary flexibility in the workplace and to successfully overcome new work challenges that arise in front of them. Within the given business framework, higher educational institutions also face the challenge of training young people for successful integration into the dynamic labor market, which requires an ever-widening spectrum of formal and informal knowledge and skills. The intensification of cooperation between employers and educational institutions, through the introduction of a dual higher education program, was recognized as an effective way of overcoming the aforementioned challenges. In this regard, the aim of this paper was to examine the degree of satisfaction of employers with the piloting of dual higher education in Montenegro. The results revealed a high level of satisfaction of employers, whose main motive for participation in the project stemmed from the possibility of networking with educational institutions and the future workforce, as well as increasing the social reputation and social responsibility of the company itself. The obtained results enable a more detailed overview of the benefits, but also the challenges that need to be overcome in the future, in order to ensure the improvement of formal higher education through the development and implementation of the future strategy of dual higher education.*

Key words: *dual higher education, strategy, students, employers, Montenegro*

1. INTRODUCTION

The modern market environment imposes the need for accelerated adaptation of employees' knowledge and skills to new business challenges that arise every day. In such circumstances, providing space for the professional development of personnel becomes one of the most important tasks not only of companies but also of educational institutions. The above points to the need for a higher degree of compliance of curricula and programs at higher education institutions with the real needs of the labor market (Tobolowsky & Allen, 2016; Basit et al., 2015)). However, what characterizes formal higher education is the insufficient degree of flexibility, that is, the possibility to introduce changes in the curriculum to fully follow the continuous changes in the labor market (Ayoubi et al., 2017; Annie & Hamali, 2006). One of the possible solutions to the previously mentioned problem is reflected in the introduction of dual higher education, where students, in addition to acquiring theoretical knowledge at the university, have the opportunity to gain practical knowledge through learning through work, which will significantly facilitate them the overcoming work challenges in the modern workplace environment (Basit et al., 2015). In this way, the gap between theory and practice is bridged, making graduates more prepared for the labor market through a better understanding of economic trends, and also by solving everyday problems that arise in the business environment. An important benefit of such an education program is a better connection between the economy and institutions of higher education. In other words, employers are enabled to "identify" students who, with their mentoring and the theoretical knowledge acquired at the university, will be ready to respond to the challenges and real problems of the company where he is being trained. In this way, the students not only adopt working habits but also learn how to professionally behave in an organization and communicate with colleagues, which enables them to nurture increasingly

important and popular soft skills (Succi & Canovi, 2020), in addition to further improvement of hard skills that they already possess. Besides of that, this type of education provides students with strong professional and/or practical relevance of chosen study program, lecturers with higher practical competencies and good chances on the employment market and future prospects (Hesser, 2018; Kilgore & Wagner, 2017). However, it is important to point out that dual education offers benefits not only to students but to universities and companies as well (Pogatsnik, 2018). Past experiences in many countries, including Austria, Germany, Slovenia and Serbia, have shown that universities, by implementing dual study programs, gain young, highly motivated, interested and responsible students, lower the dropout rates, strengthen their cooperation network with other organizations, acquire a broad insight into technological change within different companies and ensure access to new technologies in innovative companies (Hesser, 2018). When it comes to employers, although dual higher education requires them to invest certain amount of time and effort in the practical education of students, it results in securing highly qualified and performance-oriented recruits who tend to exhibit strong loyalty to the company, long familiarization period which enables them to better understand the competencies of the student and determine the best area of his employment, all that while intensifying the contact between universities and other educational institutions that provides them facilitated transfer of technology and knowledge (Hesser, 2018).

Precisely due to the fact that the model of dual higher education provides important benefits for all stakeholders and facilitates the solving of the problem of the mismatch between formal education and requirements of the labor market, a structural project DUALMON – “*Strengthening capacity for the implementation of dual higher education in Montenegro*”, has started (Dualmon, 2020). It is a structural ERASMUS+ project of the University of Montenegro, (UOM) which is being piloted by four faculties (the Faculty of Economics, the Faculty of Electrical Engineering, the Faculty of Maritime Affairs, and the Faculty of Tourism and Hotel Management), with the main aim to introduce the dual higher education in Montenegro through its recognition into legal framework and inclusion in the existing and/or new study modules on the higher educational institutions. The implementation of this project started at the beginning of 2021. and by now the first group of students from all faculties involved had the opportunity to complete a 6-week internship in reputable companies that operate in Montenegro (Dualmon, 2022).

The experiences of all parties involved (i.e. students, faculties, and employers) in this process are of great importance for understanding the main challenges that must be solved to make dual study programs an integral part of higher education in Montenegro in the future. The experiences of other countries revealed that one of the important challenges that arise when it comes to the introduction of dual higher education stems from the companies’ initial resistance to engage in this type of education, due to the significant effort that they have to invest in educating students, which is often difficult to harmonize with the ongoing working tasks and processes (Sîrbu et al., 2022; Pinnow, 2019). Bearing in mind that, within the implementation of the DUALMON project, Montenegrin employers were included in the dual higher education program for the first time, this paper aims to investigate the degree of their satisfaction with the piloting of the project. In other words, the main research question that the authors aim to answer is: *How satisfied are employers with the way in which the dual higher education project - DUALMON was piloted in Montenegro?* Answering this question is of great importance because employers’ experience and readiness to engage in a similar process in the future enable foreseeing the main opportunities and challenges of the implementation of dual higher education in this country. In this way, the paper will provide not only a theoretical contribution, in the form of supplementing the existing literature on this topic but also a practical contribution by giving insight into the perception of employers and their readiness for further participation in the process of dual education of students, which is of great importance for creators of future education policies in Montenegro.

2. MATERIALS AND METHODOLOGY OF THE RESEARCH

Based on the aim of the paper, for the purposes of data collection, an empirical survey was conducted in June 2023, on a sample of 22 respondents. The survey was conducted using a questionnaire, which was distributed online to all employers, i.e. mentors who were in charge of practical training of students during the internship at the employer. The questionnaire consisted of questions of open and closed types, as well as questions based on the Likert scale for measuring attitudes. The first set of questions was aimed at researching the basic motives, expectations, and barriers that employers faced when

making a decision on engagement in a dual higher education program. The second part of the questionnaire was aimed at evaluating the satisfaction of employers with established cooperation with students during the internship itself, while the third set of questions was related to the satisfaction with the communication that employers had with the faculties, as the main initiators of the project. The researchers primarily employed a qualitative research approach to handle the data collected from the aforementioned sample, as the main focus of this research was to assess the perception and attitudes of the employers. The acquired data underwent analysis using descriptive statistics. During the data analysis process, the authors adopted an abductive research approach. They examined the attitudes of individual mentors from companies using an inductive method and subsequently drew general conclusions about their perception and level of satisfaction utilizing a deductive approach. The outcomes of this analysis are presented in the subsequent section of the paper.

3. RESULTS OF THE RESEARCH

Data analysis resulted in encouraging results regarding employers' satisfaction with participation in the dual higher education project - DUALMON. Namely, almost all respondents are satisfied with the way in which the DUALMON project was piloted (ratings 4 and 5), while only 1 respondent rated his satisfaction with the method of piloting the project with a grade of 3. Among the most important motives for participating in the project was the possibility of networking with educational institutions and the future workforce, as well as increasing the social reputation and social responsibility of the company itself, which is presented in Figure 1.

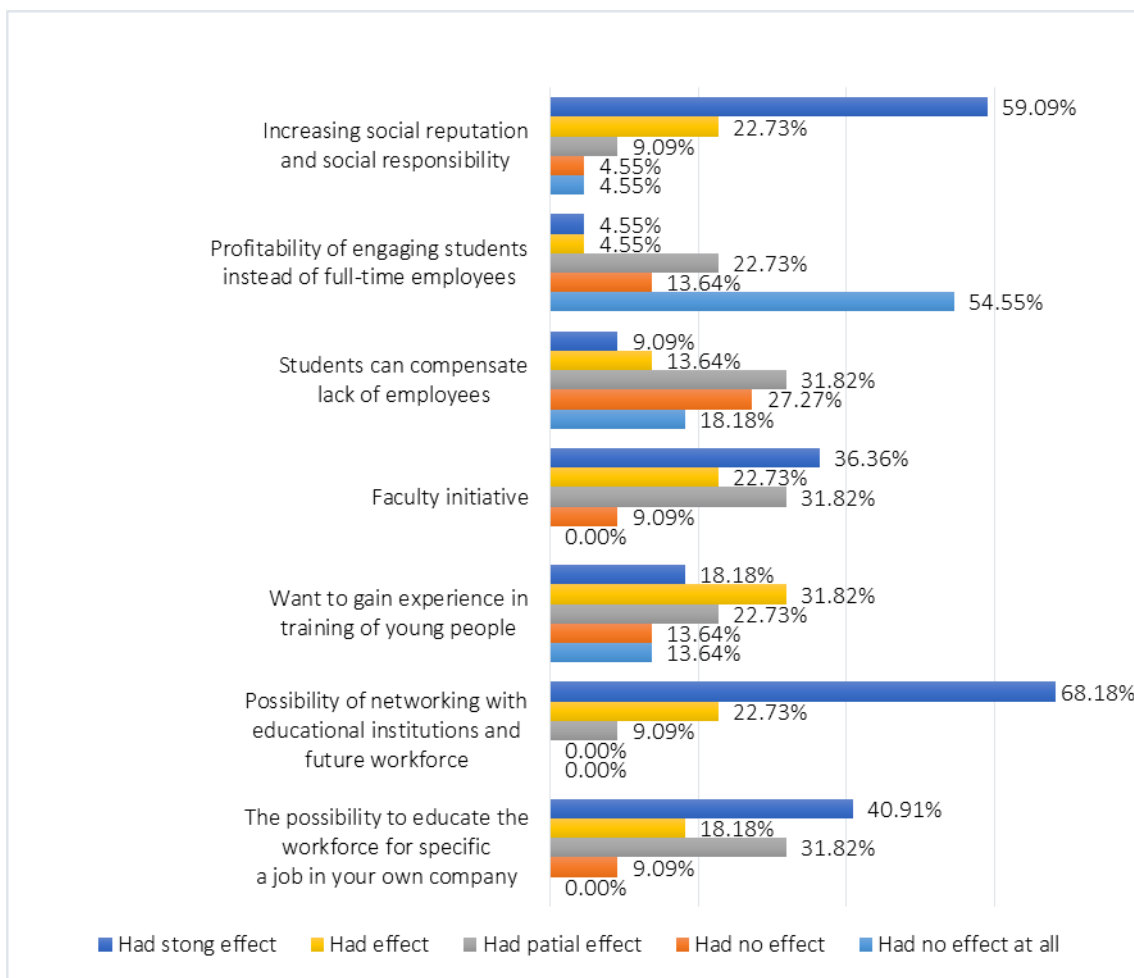


Figure 1: Reasons that influenced employers to participate in the DUALMON project (source: own processing)

As given in the Figure 1, most of the respondents (59.09%) also recognize dual model of studies as an opportunity to participate in the education of future workforce for specific jobs in their companies, which can long-term contribute to solving problems that they face in the process of recruiting. However, employers have a divided opinion regarding the issue of whether dual students can significantly contribute to the realization of working tasks in the company during the internship. While almost a third of them (23.73%) think that students cannot compensate lack of employees, the opposite opinion 45.45% of respondents, so this can be considered an important motive for joining the project. Still, the majority of respondents (68.19%) believe that it is not profitable to hire students instead of full-time employees.

When it comes to the main barriers that prevent employers from participating in a dual higher education program, respondents believe that the most important is the lack of information about dual higher education (59.09%) and the absence of adequate legislation governing this area (54.78%). Among important ones, they also emphasize the lack of conditions and time to train students (36.37% of respondents), as well as the insufficient number of hours that the student spends in the company (31.82%). Detail overview of the importance of barriers is presented in the Figure 2.

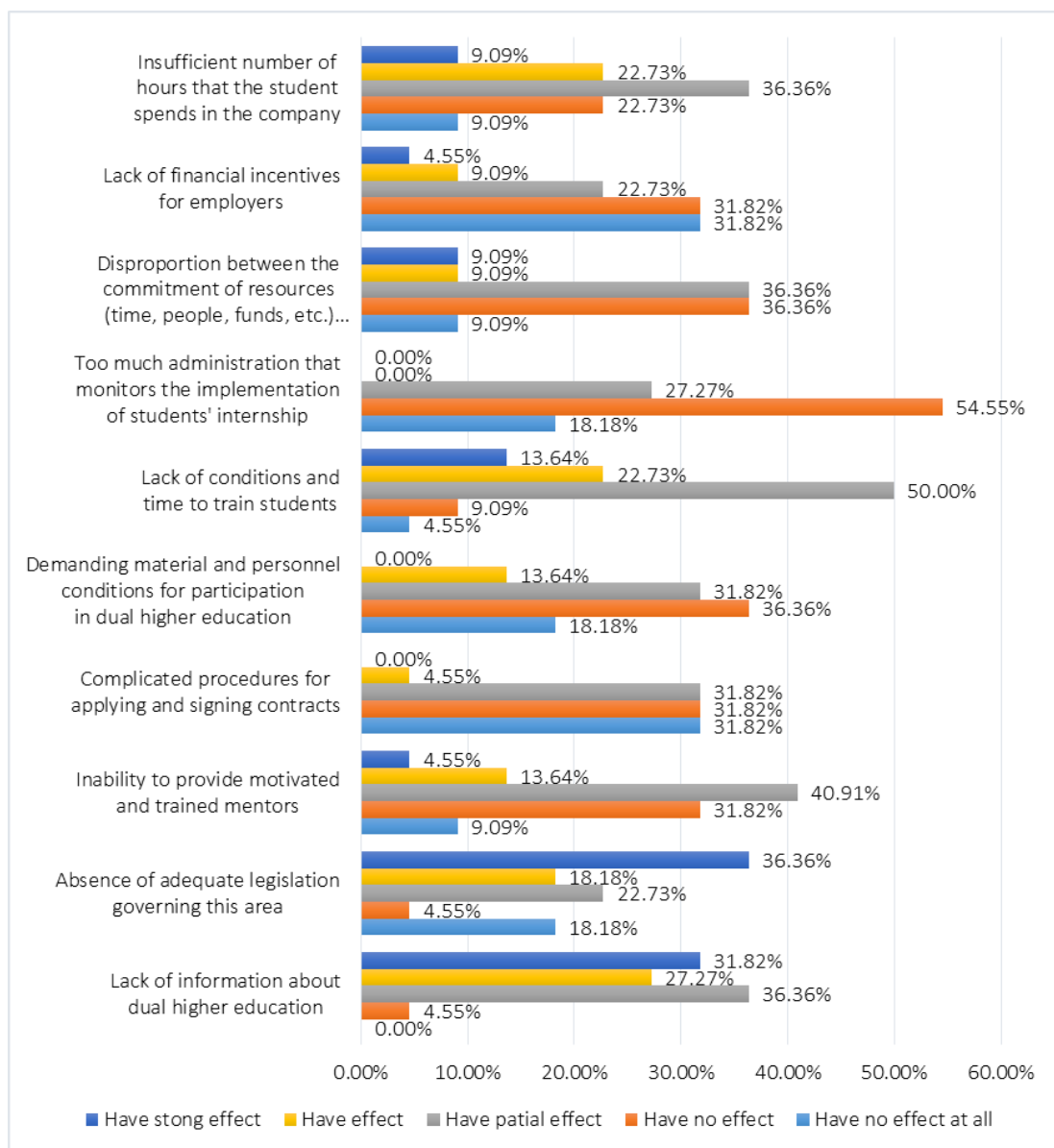


Figure 2: Barriers that prevent employers from participating in a dual higher education program (source: own processing)

However, it is important to point out that all respondents believed that the time the students spent interning in the company within the project was sufficient for the implementation of the task and the acquisition of knowledge defined by the learning outcomes. Additionally, it is encouraging that 90.9% of respondents point out that the students expressed their willingness to learn not only the tasks given in the project assignment but also what the company mentor pointed out to them as relevant. Accordingly, 50% of the respondents stated that their company expressed the willingness to hire a student who was performing “learning by doing”, while 36.4% stated that their company was still considering this option. This is in line with the experience of other countries where the introduction of dual education significantly contributed to the youth employment rate (Maier, 2022). However, the opinion of respondents is divided regarding the question of whether students, who attended practical education in a given company, acquired the knowledge and skills to be able to work effectively at another employer. While 36.4% of respondents agreed with this attitude, more than half of respondents (54.5%) did not have a defined opinion. When it comes to the quality of established communication between educational institutions and companies, the respondents' satisfaction is at a high level. 86.3% of the respondents are satisfied with the quality of communication with the academic mentor during the internship (grades 4 and 5), but 72.7% indicated the problem that the learning outcomes at the Faculty are not in accordance with the real business tasks performed by companies. This clearly highlights a need to establish more intensive cooperation between educational institutions and the economy, not only during the implementation of study programs but also in terms of the creation of curricula that will be included in given study programs, in order to successfully respond to the challenges imposed by a dynamic business environment. Another recommendations obtained from the respondents refer to the provision of financial incentives to mentors in companies so that they have the motivation to devote more time to working with students because this additional obligation is difficult to harmonize with their daily working tasks. Besides of that, they believe that the internship period should last longer, so that the mentors in the companies would be relieved of the time of working with the students on a daily basis, and the students would have more time to master more complex working tasks that they could later perform independently. The common opinion of the majority of respondents is that in the coming period, it is necessary to work on the promotion of dual higher education programs, so that a greater number of employers, i.e. the companies become aware of all the benefits that such programs would provide them in the long term. Taking into account that employers stated their contentment with various aspects of the implementation of the DUALMON project, including the quality of communication with educational institutions, cooperation with academic mentors in the process of defining student project tasks, and the overall commitment of the dual students, it can be concluded that employers expressed a high level of satisfaction the way in which the DUALMON project was piloted in Montenegro, which is the answer to the research question posed by the authors in this paper.

4. CONCLUDING REMARKS

The previously presented results of the survey of employers' satisfaction with participation in the pilot project of dual higher education - DUALMON provide several important implications. Namely, the obtained results indicated the relevance of implementing dual higher education in Montenegro in the future, viewed from the perspective of employers. Additionally, the obtained results clearly indicate the areas that require improvement, i.e. modification, in order to improve the quality and effectiveness of the management of higher dual education programs in the future, with the final aim to align the theoretical knowledge that students acquire during formal studies with the real needs and requirements of the business environment. Besides that, the obtained research results can serve as guidelines to decision-makers in the higher education sector, with the suggestion that special effort should be made in establishing stronger cooperation with the economy in designing syllabuses and courses studied at various programs. This would ensure the necessary synergy and cooperation among all key stakeholders (educational institutions, employers, and students) and eliminate the perceived gap between the formal education system and the requirements of the dynamic labor market.

However, it is important to point out that the aforementioned research does not include the perception and satisfaction of students and academic mentors from the faculty, as equally important factors in the dual higher education program, which represents a limitation of the work, but also suggests the direction in which future research in this area should be directed. Additionally, further analyses can be aimed at comparing the perception of employers from other countries that have already successfully implemented

dual higher education programs (such as Serbia, Slovenia, Austria, etc.) with the aim of better understanding the barriers that need to be overcome in order to achieve long-term sustainability of dual higher education program in Montenegro.

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