

Research on the acceptability of the dual model of education in the textile industry sector

DOI: 10.35530/IT.073.02.202114

GABRIJELA GRUJIC

ABSTRACT – REZUMAT

Research on the acceptability of the dual model of education in the textile industry sector

For the purpose of the research on the acceptability of the dual model of education in higher education, 30 companies from the textile sector were selected. The obtained results show that the respondents accept the dual model of education in a large percentage, ranging from 80% to 83.33%. From the answers related to decision-making on accepting the dual model of education in their companies, the respondents showed a positive attitude in the percentage ranging from 56.66% to 73.33%. A lower percentage of eligibility indicates that respondents will not make an immediate decision without additional information. From the answers related to the large administration and the number of documents for the inclusion of the company, the respondents believe that this administration is unnecessary. Only 13.33% of respondents believe that the existing administrative conditions are not an obstacle to companies' acceptance of dual education.

Keywords: dual model of education in higher education, textile industry, Government of the Republic of Serbia

Cercetare privind acceptabilitatea modelului dual de educație în sectorul industriei textile

În scopul cercetării privind acceptabilitatea modelului dual de educație în învățământul superior, au fost selectate 30 de companii din sectorul textil. Rezultatele obținute arată că respondenții acceptă modelul dual de educație într-un procent mare, variind de la 80% la 83,33%. Din răspunsurile legate de luarea deciziilor privind acceptarea modelului dual de educație în companiile lor, respondenții au manifestat o atitudine pozitivă în procentaj, variind de la 56,66% la 73,33%. Un procent mai mic de eligibilitate indică faptul că respondenții nu vor lua o decizie imediată fără informații suplimentare. Din răspunsurile legate de birocrăție și numărul de documente pentru implicarea firmei, respondenții consideră că această activitatea este inutilă. Doar 13,33% dintre respondenți consideră că aspectele administrative existente nu reprezintă un obstacol în calea acceptării de către companii a educației duale.

Cuvinte-cheie: model dual de educație în învățământul superior, industria textilă, Guvernul Republicii Serbia

INTRODUCTION

In the last three decades, the European fashion sector in the fields of textiles and clothing has undergone a great transformation. This industry, which is dominated by small and medium enterprises, has largely abandoned the low values of mass production. Significant to the success is that this industry has largely opened up a wide range of new areas of application for textile materials around the world, practically to all industrial and consumer sectors. Thus, European industry in this sector has successfully maintained positions with higher added value in the supply chain. Those that are typically related to knowledge, advanced technological capabilities and highly specialized skills. This includes research, development, testing, and highly flexible, strictly controlled production of functional textile materials for complex components or products in the textile sector. It also includes design, efficient custom production

and fast delivery of textiles with high fashion content and outstanding added value of clothing for demanding markets.

The European textile and clothing industry has traditionally been regionally grouped, usually under the influence of available raw materials, processing aids as well as human resources or relevant end markets. The sectoral innovation community, that is, research and educational institutions and industry is organised to develop the fashion industry. The dual model of education occupies a significant place in developed European countries [1, 2].

The Serbian textile industry faces similar challenges. This industry today has 64,156 employees. It had realized exports in the period January – October 2020 in the amount of 747.3 million dollars. According to the export results, the textile industry has long been at the top of Serbian exporters [3].

HUMAN RESOURCES AS A BIG CHALLENGE OF THE TEXTILE INDUSTRY

A great challenge, that the whole fashion sector in all EU regions has, is the lack of interest of young people to pursue their careers in this sector. Despite the ETF (European Technology Platform) research which predicts that around 600,000 new jobs will be created in the fashion sector by 2025, this sector is of little interest to young people. The exceptions are design and fashion marketing. The education system at all levels in the EU, except for rare examples, reduced the number of their students. Research shows that, in Eastern European countries, young people's interest in joining the sector is far greater than in other regions. Therefore, all regions see a solution to this problem in organizing a campaign to attract young people to this sector similar to the existing successful Go Textile campaign in Germany [4–6]. Research by the European Skills Council – Textile Clothing Leather & Footwear shows that in addition to experts with a higher level of education in technology, management and creative disciplines, there is an acute need for staff for manufacturing occupations, technicians and similar jobs. The survey shows that 93% of all textile and clothing companies in Europe employ no more than 20 people. This shows that flexibility and multiple skills are largely needed. Therefore, it appears as a necessary need to organize ways to acquire skills for certain jobs in the fashion sector. The real situation shows that these specialization training are not yet firmly accepted in all European textile regions. The potential is especially unused in parts of southern and eastern Europe. The Serbian textile industry faces similar challenges. In the 21st century, young people should adopt the philosophy of education as their philosophy of life. Rapid technical-technological development brings with it new challenges and the question is how to overcome those challenges today. Among other things, it brings awareness to young people that education is a pillar of building a successful professional career [1, 2].

Dual model of education as one of the solutions

A skilled workforce is one of the key resources not only for the Serbian economy but also for all economies in the world. The systemic connection between the world of work and the world of education, therefore, appeared necessary. To that end, the introduction of dual education in the system of secondary and higher education and in the textile sector has begun in Serbia. This is expected to use the potential to advance the transition from school to the world of work and offer young people a career planning perspective. Innovation and investment in education are considered to be key preconditions for preparing society for the future [1]. Introducing a dual education system is no easy task. This system cannot only be copied to Serbia from countries such as Germany, Austria or Switzerland. In order to achieve sustainable results, a lot of work

must be done on adapting the dual system from those countries to the existing conditions that currently exist in Serbia in the education system as well as in the economy [7].

Dual education in Serbia started with GIZ. Almost 20 years ago, GIZ, the German Agency for International Cooperation in the Field of Economic Development, with the consent and support of the ministry in charge of education, began implementing a project piloting the application of dual education in Serbia through educational profiles such as locksmith welder [8].

The Ministry of Education, Science and Technological Development has committed itself to educational reforms in the light of accession to the European Union. Education reform is focused on the modernization of general, vocational and higher education, digitalization, entrepreneurship, coverage and quality of preschool education. Serbia has launched an ambitious skills development agenda, taking into account skills that will be needed in the future. The Ministry of Education, Science and Technological Development has expanded its capacity to meet national priorities, establishing the Sector for dual education and the Sector for digitalization in education and science [9–20].

METHODOLOGY OF RESEARCHING THE ATTITUDES OF BUSINESSMEN

In order to spread the idea of the acceptability of the dual model of education, an analysis of the attitudes of businessmen in domestic textile companies was performed. The research was realized on the basis of a specially designed instrument – an expert interview. The expert interview was conducted in order to come to preconditions for establishing guidelines for improving the acceptability of the dual model of education in the field of the clothing industry, in the function of developing the competitiveness of domestic companies in conditions of intensifying competition in the international market. This research involved designing a questionnaire and a sample of respondents. The interview is direct and structured and its role is to enable relevant views to be obtained in this area. The questionnaire is designed to include questions of the benefits of the dual model of study for all participants as well as questions related to the administrative procedures provided for employers to admit a student to their companies [21].

The research of the attitudes of businessmen was conducted in the period from the beginning of December 2020 to the end of January 2021 on the territory of the Republic of Serbia, with the aim of obtaining the opinion of businessmen from domestic companies. In addition to the owners of the company, the research also includes managers who are expected to be involved in working with students who opt for a dual model of learning in that company. During the research, it was noticed that the attitudes of all entrepreneurs do not differ from each other to a greater extent. Namely, from the answers of entrepreneurs, it could be concluded that they have

similar attitudes, regardless of whether the entrepreneurs are from small, medium or large companies. For that reason, the research sample was designed for a size of 30 units. Based on the answers of businessmen from domestic companies (mainly medium and large companies), the basic assumptions that creatively influence the process in modern training of students according to the dual model of education were reached in the survey. This research was done in order to develop the national economy, especially providing quality staff for the economy and increasing their employment, which would all lead to improving the competitiveness of domestic textile companies.

Using statistical methods in the analysis of responses in order to obtain relevant data on the conceptual form of certain quantities, as determinants and attributes for modelling management processes, a certain set of attitudes is given that give the basic characteristics of the management model. All relevant factors in the research were analysed through a survey where businessmen of domestic companies gave their opinion on the basis of which attitudes emerged that will serve as a basis for improving the dual model of student training, which aims to determine the process management strategy.

PRESENTATION OF RESEARCH RESULTS

The total number of analysed companies is 30. Of that number, 7 companies have up to 10 (micro-companies) employees, 19 companies have up to 50 employees (small companies), 4 companies have up to 250 employees (medium companies) and two companies have over 250 employees (large companies). All companies are privately owned. Regarding the structure of the respondents, 12 of them are business owners, while the rest are managers in various jobs of technical preparation and production.

1. When asked if you think that this dual model of education is good because it allows students to acquire real knowledge in an industrial environment, respondents answered with: Yes – 80%; Partly good – 10% and No – 10%.

2. Most of the respondents (83.33%) agree that the dual model of education is a better way of choosing staff than the existing one, 16.66% agrees partially, while 0% disagrees.

3. 73.33% of respondents agree that this is a good way for you to provide deficient staff, 10% agrees partially, while 16.66% disagrees.

4. 66.66% of respondents think that this is a good opportunity to solve their staffing problems, 16.66% of them partially agrees that this is a good opportunity, while 16.66% thinks that it is not.

5. Sixty percent of respondents think that better quality staff can be produced this way, 23.33% partially agrees, while 16.66% does not agree.

6. Most of the respondents (56.66%) consider that the change of generations in their company can be successfully done in this way, 26.66% partially agrees, while 16.66% disagrees.

7. Results of the survey show that most of the respondents (80%) agree that the dual model of education represents an improvement of the previous way of education, 16.66% agrees partially, while 3.33% does not agree with this statement.

8. When asked if you think that students in your company, through work-based learning, will increase their motivation because they will have the opportunity to learn from older future colleagues, who at that early age can be role models who influence their future decisions and professional orientation, respondents answered with: Yes – 93.33%; Partially – 6.66% and No – 0%.

9. The majority of respondents expressed a negative attitude towards administrative barriers: 73.33% agreed that seeking a large amount of evidence that companies meet the requirements for learning through work is an administrative barrier, 13.33% partially agreed, while 13.33% disagreed with the given attitude.

The most significant research results

The most significant research results are the following:

1. To the questions under ordinal numbers 1, 2 and 7 which refer to the general opinion on dual education, the respondents answered positively and in a large percentage ranging from 80% to 83.33%;

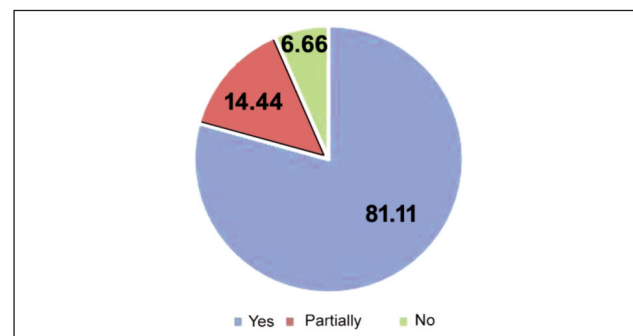


Fig. 1. Attitudes of respondents about the acceptability of the dual model of education

2. A large number of respondents, question number 8, believe that students in their company can successfully be trained. As many as 93.33% answered positively, 13.33% partially and no one answered negatively;

3. To the questions under ordinal numbers 3, 4, 5 and 6, which refer to the direct acceptance of students and solving their personnel problems, the respondents answered positively, from 56.66% to 73.33%. This shows that the respondents are not ready to immediately, without more detailed information, enter the dual model of education in their own company. This indicates that respondents do not have enough information to specifically apply dual education in their company. This requires the need to further promote dual education in order to make it clearer what are the benefits provided by dual education.

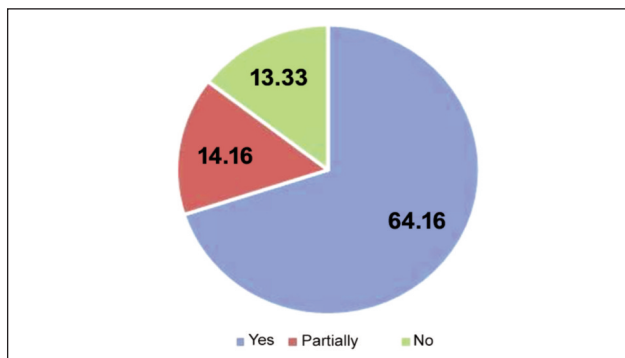


Fig. 2. Attitudes of respondents to include their own enterprise into a dual model of education without additional information

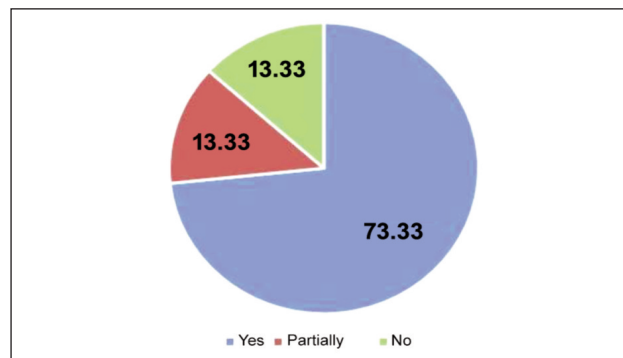


Fig. 3. Respondents' attitudes about administrative barriers to accepting the dual model

4. To the question, under number 9, a large number of respondents believe that unnecessary administration, which is reflected in the submission of a large amount of evidence, is an obstacle for companies to more easily accept the dual model of education. Only 13.33% of respondents believe that the existing administrative conditions are not an obstacle to accepting dual education.

CONCLUSION

Serbia is making significant efforts to provide skilled labour for the economy. To that end, the introduction of dual education in the higher education system has begun. This is expected to use the potential to advance the transition from school to the world of work and offer young people a career planning perspective. Innovation and investment in education are considered to be key preconditions for preparing society for the future.

In this paper, 30 companies from the textile sector were selected to investigate the acceptability of the dual model of education in higher education. The

obtained results show that the respondents accept the dual model of education in a large percentage, ranging from 80% to 83.33%. From the answers related to decision-making on accepting the dual model of education in their companies, the respondents showed a positive attitude in the percentage ranging from 56.66% to 73.33%. This shows that respondents will not make an immediate decision without additional information. From the answers related to the large administration of enterprise involvement, the respondents consider that administration to be unnecessary. Only 13.33% of respondents believe that the existing administrative conditions are not an obstacle to companies' acceptance of dual education.

The results of the work indicate that in the future it is necessary to work more on informing companies about the advantages that dual education offers. The results also indicate that special attention should be paid to further simplification of administrative documentation that allows companies to join the dual system.

REFERENCES

- [1] Grujic, G., *National Model of Dual Education: The Road to the Future of Serbia*, Ministry Education, Science and Technological Development, PE "Official Gazette", 2020
- [2] Grujic, G., *Dual education*, In: Textile Science and Economy X, 10th International Scientific-Professional Conference, May 20–21st, 2019, Zrenjanin, Serbia, 30–31
- [3] Chamber of Commerce and Industry of Serbia, Available at: <http://www.pks.rs> [Accessed on December 11, 2020]
- [4] Katovic, D., Bichof, V., *European technological platform for the future of textiles and clothing - vision until 2020*, In: Textile, 2006, 55, 7, 340–374
- [5] *Textile and Clothing Industry in the Enlarged European Union and Prospects in Candidate Countries*, In: Textiles, 2006, 55, 3, 159–163
- [6] The European Technology Platform for the Future of Textiles and Clothing (Textile ETP), Available at: <http://www.textile-platform.eu/> [Accessed on December 10, 2020]
- [7] Bolli, T., Caves, K.M., Renold, U., Buergi, J., *Beyond employer engagement: measuring education-employment linkage in vocational education and training programmes*, In: Journal of Vocational Education & Training, 2018., 1–40
- [8] Euler, D., *Dual secondary vocational education in Serbia*, Feasibility study within the project of the German organization for technical cooperation – GIZ d.o.o. (Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH), Ministry of Education and Technological Development of the Republic of Serbia, 2015
- [9] *Law on Dual Model of Studies in Higher Education*, In: Official Gazette of RS, 66/2019 of 18.9.2019
- [10] *Law on Foundations of the Education System*, In: Official Gazette of RS, 88/17, 27/18 – other laws and 6/20
- [11] *Law on Secondary Education*, In: Official Gazette of RS, 55/13, 101/17 and 27/18 – other law and 6/20

- [12] *Law on Dual Education*, In: Official Gazette of RS, 101/17 and 6/20) and Rulebook on the curriculum of teaching and learning (different documents depending on the educational profile)
- [13] *Rulebook on the training program for instructors and more detailed conditions for taking the exam for instructors*, In: Official Gazette of RS, 70/18
- [14] *Rulebook on the manner of allocating students for work-based learning*, In: Official Gazette of RS, 102/18
- [15] *Rulebook on detailed conditions, manner of work, activities and composition of the team for career guidance and counseling in high school that implements educational profiles in dual education*, In: Official Gazette of RS, 2/19
- [16] *Decree on Determining Dangerous Work for Children*, In: Official Gazette of RS, 53/17
- [17] *Rulebook on the organization, composition and manner of work of the Commission for determining the fulfillment of conditions for conducting work-based learning with the employer*, In: Official Gazette of RS, 46/18
- [18] *Law on Health Insurance* (Article 22, paragraph 1), In: Official Gazette of RS, 25/19
- [19] *Law on Contributions for Compulsory Social Insurance* (Article 11, paragraph 3, Articles 35 and 47), In: Official Gazette of RS, 4/19 – adjusted dinar amount
- [20] *Law on Personal Income Tax*, Article 9, paragraph 23a, In: Official Gazette of RS, 4/19 – adjusted dinar amount
- [21] Wattle, I., *Interview as a research method: theoretical aspects*, In: CIVITAS 9, 2019, 2, 201–2014, UDC 303.62 317.77, SR.ID 261516807, ISSN 2466-5363
-

Author:

GABRIJELA GRUJIC

Ministry of Education, Science and Technological Development Republic of Serbia,
Nemanjina 22-26, 11000 Belgrade, Serbia

Corresponding author:

GABRIJELA GRUJIC

e-mail: gabrijela.grujic@mpn.gov.rs