

Vocational Education Systems in Germany and Turkey: Comparative Analysis*

Sistemas de educación profesional en Alemania y Turquía: análisis comparativo

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ABSTRACT

Globalization challenges, which affected the geopolitical and economic processes, labor market transformation and education internationalization have shaped the urgency of the problem. The purpose of the article is to compare vocational education systems in Germany and Turkey (using the dual system as an example) in order to identify the possibilities of transferring ideas and practices of the dual education system. A comparative analysis is the leading research method, which uses the context, transfer and forecasting methodology. Description and comparison of the context main elements allow determining the possibilities and conditions of the dual education system transfer. The findings provide an opportunity to identify transfer risks and predict the consequences of borrowing. The research results significance consists in context, transfer, and forecasting substantiating as the comparative analysis elements and applying this methodology to the processes of professional education.

Keywords: comparative analysis, context methodology, professional education, dual education system.

RESUMEN

Los desafíos de la globalización, que afectaron los procesos geopolíticos y económicos, la transformación del mercado laboral y la internacionalización de la educación, han configurado la urgencia del problema. El propósito del artículo es comparar los sistemas de educación vocacional en Alemania y Turquía (utilizando el sistema dual como ejemplo) para identificar las posibilidades de transferir ideas y prácticas del sistema de educación dual. Un análisis comparativo es el método de investigación líder, que utiliza el contexto, la transferencia y la metodología de pronóstico. La descripción y comparación de los elementos principales del contexto permiten determinar las posibilidades y condiciones de la transferencia del sistema educativo dual. Los hallazgos brindan la oportunidad de identificar los riesgos de transferencia y predecir las consecuencias de los préstamos. La importancia de los resultados de la investigación consiste en el contexto, la transferencia y el pronóstico que se justifican como elementos de análisis comparativo y se aplica esta metodología a los procesos de educación profesional.

Palabras clave: análisis comparativo, metodología de contexto, educación profesional, sistema de educación dual.

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1. Introduction

The research objective, which is based on the comparative studies methodology, is to conduct a comparative analysis of modern vocational education systems development in Turkey and Germany.

Globalization and education internationalization all over the world are perceived as a *fait accompli* (Brown, Kirpal, Rauner, 2007) and entail changes in the system of vocational education. The beginning of the new millennium and the Fourth Industrial Revolution were marked by a crisis for vocational education in many countries, requiring the comprehension of existing experience and determination of development paths (Mulder, 2017). The economy and labor digitalization, the production modernization changes, the demographic indicators trends and the migration flows of the last ten years have stimulated the need for reforming vocational education systems. It is possible to change and develop national vocational education systems in the context of globalization through the search, adaptation and implementation of best practices, so it is highly necessary to compare the conditions, characteristics, and functioning of the world vocational education systems (Pizmony-Levy, 2011). The desire to borrow effective educational models actualized the need to analyze the prerequisites for their creation, implementation mechanisms and conditions of effectiveness.

The European Union highly prioritizes the issues of vocational education system. Initiatives such as the European Qualification Framework, research projects studying the problems of introducing international performance indicators and the system of loans transfer in vocational education, and international mobility programs are being implemented. Germany is the leader among the countries of the European Union in the field of vocational education and training. The German dual system has established itself as a unique, high-tech and effective model for the reproduction of the country's workforce, claiming the status of a universal global system. Since the 1980s, when the German dual system participated in cross-border cooperation within the framework of European educational programs, Germany has pursued an active policy of disseminating the experience of dual education in the global educational space (Stenstrom, Lasonen, 2000). Germany is expanding its educational policy through exporting the dual system model to the countries of Asia and Latin America, indirectly forming platforms for the workforce that both Germany and all countries of the European Union need. Germany's neighboring countries as well as its political and economic allies, actively use Germany's experience.

In this regard, it is logical that Turkey, which historically had strong ties with Germany, in the last decades of the 20th century has become a country that has gained experience in implementing projects to introduce elements of the dual system of Germany. Moreover, declaring its desire to enter the European Union at the end of the 20th century, Turkey was forced to compensate for the shortcomings of the resulting voids in the field of professional education in order to use the results of these projects to stabilize the country's economic and social situation (Barabasch, Petrick, 2012).

2. Methods

International projects and vocational education and training development initiatives consist not only of material support, but also mean the transfer of ideas that can be formally regarded as an ideology export in the field of vocational education. While financial support and technical equipment are less sensitive to the situation context, the success of borrowed ideas and practices implementation directly depends on the context and potential of people in this context.

Understanding the problem of local reception of foreign educational policy from a context position has been discussed since the first days of the globalization study. Verger (2011) studied the resonance reasons of a particular practice or reform in a specific context, tried to get away from the global level to the regional one, analyzing the reception and translation of the global educational policy into the local context. Researchers transferring reforms and practices (Landman, 2003, Little, 2000) often use this methodological approach. Joseph Tobin argued that '... a comparative study requires reflection on space and time at the same time' (Tobin, Hsueh, Karasawa, 2009: 17); just because each process of transferring ideas and practices is selective, there might be some questions like why only some aspects of the best practices in the field of education are borrowed and how they are modified at the local level?

Academic fields such as pedagogical comparative studies borrows methodology from anthropology, economics, sociology and political science. Foreign comparativists rely on interpretative research methods that are associated with specific disciplines. Gita Steiner-Hamsey, a professor at Columbia University, insists on theories and methods beyond disciplinary boundaries that are best for explaining a phenomenon. She writes about the need to create strong methodological foundations that will form not only methods of cognition, but also the ability to observe phenomena (Steiner-Khamsi, 2014). The comparison method is based on an interdisciplinary approach in summarizing the conclusions about the similarities and differences of ideologies and educational practices. The study of best practices, international standards and a detailed analysis of institutions' work that not only implement them, but also manage, finance and use them as program conditions, have become relevant topics in comparative research in pedagogy. Thus, the answer to the questions that arise when analyzing the process of transferring ideas and practices can only be given after a detailed analysis of the context, from observing global trends in education to researching a specific country.

The context methodology is important when considering the transfer of ideas and mechanisms for borrowing educational practices. According to Phillips and Oaks (2004: 780), '... all aspects of educational policy are embedded in the context, and the degree of contextuality varies depending on each situation'. Explaining the concept of 'social rooting' through the prism of an educational phenomenon, Cowan (2006) lists such factors as history, economics, geography, language, religion and political philosophy, and considers them to be the most important elements of a specific context. The expanded concept of the context (Wolf, 2014) includes such important elements such as work culture concept, the work regime, labor legislation, and the development and application degree of modern labor technologies, social development mechanisms of

safety and the administrative order of society. Wolf believes that all of these elements can influence the interpretation, implementation, and success of borrowed ideas and practices in vocational education.

The term 'context' is widely used in postmodern humanitarian literature. It can be used when it is necessary to describe the background, environment, situation, circumstances, situation, conditions, or indicate the studied object perception peculiarity, i.e. the point of view, position, aspect or study perspective, etc.

The context concept is ambiguous and multifunctional, therefore, it is possible to replace it with a significant number of various special terms, which often happens in scientific texts. In particular, Kasavin (2008) proposed a line for the development of contextualism as a methodological program of research in philosophy. A number of Western scholars developed this philosophical approach in their works: Dewey, Lewis, Cohen, Morris, Unger, Pepper et al. They considered the context as a situation or process that determine understanding and interpretation one or another phenomenon. Kasavin (2008) considered the context in its broad meaning, as a set of conditions for interpreting various cultural phenomena and solving cognitive problems on this basis, i.e. as a methodological term.

To achieve the goal, it is necessary to conduct a comparative study, analyzing the origin or formation of vocational education systems, the functioning and development of vocational education systems, the effectiveness of the vocational education system. Therefore, in order to conduct a comparison of vocational education systems formation in Germany and Turkey, the main context elements were used, i.e. the formation of vocational education history; the influence of religion on human attitudes to work; the role of national traditions in the work culture formation; the state role in educational and social policies formation, in economics and the labor market.

Particular attention should be paid to visualizing the image of the future system and forecasting challenges and problems. Comparative analysis involves 'ontological work and the formation of a new picture of the world' (Shchedrovitsky, 2018: 126) followed by 'creating images of a possible future', as a result, the institutional matrix of the vocational education system will be formed, which will support cooperation between the subjects of this system. It will help individuals, communities, corporations and social organizations set goals and see understandable indicators of their achievement, it is necessary to build value images of a possible future for professional areas of activity and problem situations. When building a new image of the future, it is important to see the activity 'voids' to predict the possibilities of filling them.

3. Result

Historical background of vocational education.

Germany. The history of the dual education system in Germany has its roots in the Middle Ages, the organization history of crafts and the guilds formation with certain requirements for its members. In addition, Protestantism formed a special work ethic, which later became the cornerstone of German professional pedagogy. The late 19th and early 20th centuries were marked by several significant events in the life of European society, which served as the basis for the formation of the dual education system. The industrialization, which entailed many social changes, has become a fertile ground for innovative philosophical and pedagogical ideas. In particular, the pedagogical ideas of Georg Kershensteiner, who proposed to teach students not only the skills of the profession, but also the theoretical foundations of professional knowledge, had a significant impact on vocational education in Germany (Kershenshtainer, 2017). During this period of state development, German Chancellor Otto von Bismarck actively developed the idea of national security and a social state (Obolenskaya, 1992). Bismarck conceived his reforms as a means to transform the working class into a community of state loyal and conservative German citizens. This concerned the least protected segment of the labor society, to which the students belonged. In the era of the First and Second World Wars, marked by the militarization of Germany, the country's victorious Nazi politics and the ideology crisis, the crisis of vocational education broke out. In Germany, after the Second World War, the concepts of labor education were based on Protestant values, normative pedagogy, spiritual and moral national traditions, which fit into the historical outline of the state development. In the German Democratic Republic, where the ideology of socialism was adopted, universal and collective values were declared and atheism was proclaimed. This situation undoubtedly divided the education of Germany and, after reunification, influenced the further development of vocational education.

Christian culture values revived in education of the united Germany. The concept of labor education, personality-centered approaches aimed at developing the abilities and self-realization of the student were updated, and active labor was considered and is considered the main condition for development.

Turkey. The history of handicraft as a prototype of modern vocational education in Turkey has more than one hundred years.

The historical path of Turkey's vocational education regarding the influence of religion is similar to the history of dual system formation in Germany and work ethic of the Germans. This conclusion is supported by the fact that family succession in the craft still dominates in Turkey; there is a pre-religious guild form similar to a religious union.

Researchers claim that the history of vocational education began along with the history of the modern Turkish Republic, founded in 1923 (Aydin, 2013). Prior to this, the institution of vocational education was not developed in the Ottoman Empire and there was no tradition of obtaining systemic vocational education.

In the period from 1923 to 1927, after the republic proclamation, there appeared nine vocational schools and 1060 people studied there. A great number of vocational educational institutions were reorganized as well. The first vocational educational institution was opened in 1937, and its task was to provide the process of advanced training for vocational school teachers (Bolat, 2015). The duration of vocational education, from 1924 to 1962, was five or six years and involved general academic training and vocational education. Since the beginning of the 1980s, vocational education in Turkey has had a double purpose, i.e. academic preparation for university exams and vocational training for further employment (Aybede, Orbay, 2016).

The influence of religion on attitude to work

Germany. Culture and religion have always determined the state policy and have been a factor in influencing the efficiency of economic development, society, and education. Considering the development of the German state and society, it is worth highlighting the special role of religion in the development of culture, education, and attitudes towards law, labor, and duties. The ideas of early and ascetic Protestantism of 16th and 17th centuries were embodied in the provisions of German labor education, in which labor was seen as a moral improvement of man and was the creation basis for children labor schools. Protestantism, as a branch of Catholicism, carried ideological postulates as such simplicity and modesty in everyday life, honesty and conscientiousness in fulfilling professional duty, industriousness, frugality, accuracy, punctuality. It was for these ideologems that laid the foundations of the German national character, they were embodied in its moral culture, combining traditionally pragmatic values, and influenced the principles of professional activity (Heine, 1994). Moreover, the Protestant work ethic condemned poverty, idleness, idleness and begging while a person could work, and considered it a sin, which, of course, developed entrepreneurship and rationalism as the main work ethics features, which later became the basis of the pragmatic moral German culture.

Turkey. As noted above, despite the Westernization processes of the entire social and political Turkish life in the twentieth century, religion has still had a significant impact on the system of vocational education and training. It is a well-known fact that some guilds of artisans came from medieval brotherhoods, who elected leaders and gave their earnings to provide the brotherhood with food and clothing. If we talk about the attitude to work and craftsmanship in Islam, then the category 'labor' is considered fundamental. Having learned to distinguish good from evil through labor, a person can find their way to self-improvement. Thus, labor is central to the teachings of Islam. According to Islam, upbringing in labor is, first, 'upbringing and instilling a love of labor', while labor is the development of inclinations, the upbringing of character, morality, and beliefs. All pedagogical tasks and goals come down to one thing, that is work. The Qur'an says 'it is necessary to combine both types of labor, to develop both (raas) head and (ayadin) hands' (Soong-Yong, 2004).

Religious influence can also be seen in labor division, when certain crafts were exclusively a male prerogative, and a woman could work, observing certain laws of organizing the workspace. Subsequently, thanks to Ataturk's reforms, women, according to a special article in the Turkish Civil Code devoted to women's rights, received the right to education, the right to work in public institutions, to participate in local elections, and since 1934 in Mejlis elections. At the same time, the traditions of dividing the professions into male and female are still very strong and determine the current state of Turkish labor market.

National traditions and work culture

Germany. Pedantry and rationality as the German mentality main features have become synonymous with the word 'German'. It is believed that these very qualities are the source of many advantages of German life and service. The famous 'German quality' expression arose after products manufactured in Germany had received high appreciation worldwide. There is an opinion that the German rationality is manifested by a step-by-step description of any situation. Protestantism, due to the close attention to a human personality, according to the fair remark of Khadartseva and Kokoyeva, has influenced the European historical and cultural tradition, in particular, the development of German society and the state. It has given a new model of socio-economic development based on the respectful attitude of society towards work, family, private property, freedom, the law; based on the desire of simplicity and, at the same time, prosperity (Khadartseva, Kokoeva).

Turkey. Turkish work culture has generally remained unchanged, despite the formally declared principles of democracy and equality. In the Ottoman Empire times, the military, theologians, and the aristocracy were particularly privileged castes. Artisans and peasants were at the bottom of the hierarchy. At the beginning of 20th century, the intellectuals and the military became the pillar of the Ataturk reform movement, and the purpose was to modernize and create a high-society (Arslan et al., 2009). Religion began to lose its influence mechanisms not only in public policy, but also in everyday life. However, the stratification of society was not broken, despite social reforms. Historically, higher education has been quite privileged and prestigious for young people in Turkey. Higher education meant having a high status and belonging to certain areas, i.e. medicine, politics and business. This category of people was distinguished by the desire to Europeanize their life, which was reflected in their moral culture, stimulated the borrowing and translation of European values. For handicrafts, farmers and people working in service sector, obtaining a university diploma did not become a social elevator, since income and welfare depended not on higher education, but on hard work and a desire to support their family, which ultimately contributed to an increase in the number of students in professional schools (Barabasch, Petrick, 2012).

The state role in the vocational education development

Germany. The dual education system in Germany is characterized by a wide variety of vocational schools their legitimacy is determined by the Federal Republic of Germany Law on Vocational Education, the Youth Labor Protection Act, the Handicraft and Trade Code, which regulate its functioning at the federal level. Legislative acts of the land govern the education sector and initiatives aimed at improving the training system.

The most effective socio-economic mechanisms that support dual education are legislation regulating the participation of enterprises in dual education, state and regional funding, and scholarships as a stimulator of interest in studying at a vocational school, and attracting trade unions and chambers of commerce to participate in dual education, guaranteed employment of future vocational school graduates (Pleshakova, 2019).

The dual education system effectiveness is largely determined by comprehensive legislative support at all levels of government, i.e. from federal to local.

Turkey. Mustafa Kemal Atatürk accession to power, the architect of the new secular state marked the beginning of the 20th century. Having set a goal to make Turkey a developed pro-European state, Atatürk carried out a number of state and social reforms aimed at reforming the education sector. The social welfare has traditionally been the concern of the state: prices and working conditions were regulated and mass unemployment and layoffs were not allowed. In 1936, the Labor Law was adopted, which established an eight-hour working day, overtime was limited, working conditions were regulated, hard work was prohibited for women and adolescents, and social benefits were introduced (Akpınar, Gün, 2016). In our opinion, the relevance of Atatürk's reforms to the reforms of German labor schools has a definite answer. This was a kind of copy of Bismarck social state. However, nine centuries of the sultanate and the Islamic state could not be wasted; therefore, the main stratum that currently supports Erdogan in his policy of returning to religiosity is precisely the part of society that has always been engaged in craft and trade. His reform of education satisfies their desire to merge religion and everyday life.

Turkey has always been a country of contrasts in many ways. On the one hand, historical and political development in the 20th century brought a national reorientation towards secularism and Europeanization; on the other hand, the traditions of the Ottoman Empire and Islam remain the fundamental foundation of the state and society. The unique location of Turkey at the crossroads between East and West has made the country fertile ground for the exchange of goods and ideas, and with the increasing internationalization of trade, skilled workers have become an important competitive advantage of the country. For many years, decades of internal political conflicts did not allow Turkey to pay due attention to improving the quality and accessibility of education. The economic situation of small and medium businesses in Turkey, the traditional gap between vocational educations, the apprenticeship system and the labor market have become factors that negatively affect the process of acquiring the professional competencies. Thus, the strengthening of vocational education in Turkey and the transition to formal employment are necessary to increase the production quality and efficiency, as well as to reduce poverty risks and create more stable living conditions.

4. CONCLUSION

The 'Historical background of vocational education' context makes it possible to conclude that Germany and Turkey have a rich heritage of craft work culture, and this community creates an important prerequisite for the German dual education system transfer to vocational education in Turkey. In addition, both countries experienced the need for social reforms and implemented them. However, the period for implementing social reforms between Germany and Turkey was about fifty years, which affected their timeliness and quality. The lag naturally identified the transfer risks and predetermined its subsequent implementation difficulties.

'The Religious Influence on Attitudes towards Labor' context analysis showed that both in Islam and in Catholicism, labor is the main value. Labor education has always been one of the German and Turkish pedagogy foundations. At the same time, two religions determine male and female roles in society quite differently. Such types of labor as handicraft, agricultural sector and service, a traditional province of men, have always been intensive and required hard work. That is cultivated in children by pre-religious education and the traditions of hard and permanent work in the family. This largely determines the characteristics of labor space and individual professional trajectory in vocational education systems in Germany and Turkey, which leads to their qualitative difference and negatively affects the effectiveness of the dual education system in Turkey.

The 'National traditions and work culture' contexts emphasizes that traditions and work culture determine religious and social conditions. The main difference between the two countries is that Germans have a working culture thanks to the Protestantism traditions and the established 'work ethic', which explains their rationality and pedantry, including high society. The Turks have an elite work culture determined by state preferences. They are leisurely in business, because hard work, the amount of money earned and the availability of higher education do not determine neither the position in society and nor they are a social elevator.

'The state role in the vocational education development' context convincingly shows the historical sequence and systematic, hierarchical and consistent German state policy in the development vocational education. The state policy of Turkey in the field of education does not possess such features. Atatürk's reforms did not develop in subsequent historical periods; vocational education support was not consistent due to internal political conflicts. It was the analysis of this context that showed the greatest risks of the dual education system transfer and its development.

Thus, the comparative analysis results prove the study main hypothesis, i.e. the model of the country's vocational education system is a product of national identity. Any external elements will modify, lose or acquire additional features, passing through the local reception by the national education system.

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