

Developing the Concept of Human Capital by Highlighting the Benefits for the Education System

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Abstract

The term "capital" refers to a productive resource that may be used. The term "human capital" describes human beings as one of the most important components that contribute to the long-term growth of the educational system and the advancement of society in general. Individual and collective human capital are comprised of the information, skills, attitudes, and talents possessed by people, as well as the social and cultural endowments possessed by a group, including the ability to discover, invent, innovate, and be innovative. The purpose of our research is to draw attention to the unique characteristics of the development of the idea of human capital, as well as the benefits it provides to the educational system. For this study, we focused on qualitative techniques, with the goal of gaining a broad picture of human resource management strategies in the context of digitizing the learning-asset process and providing students with long-term educational opportunities. The information gathered will be utilized to develop hypotheses and working techniques for the investigations that will be carried out in the future research projects.

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1. Introduction

Theodore W. Schultz, who pioneered the notion of human capital in the 1960s and 1960s, demonstrated how the investment of persons themselves is related with the investments that businesses make in physical capital. A human capital investment is a financial investment made in human resources with the goal of increasing their efficiency. Rather than being spent immediately, the costs of this investment are set aside for future use. According to the European Commission's 2019-2024 plan, "A Europe ready for the digital age," the success of the digital transformation of the European economy and society is a fundamental objective for the European Union. This ambitious aim, as well as the daily lives, professional lives, and economic prosperity of all European people in the digital age, will be

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impossible to achieve without investing in education and training. As a means of transforming and updating the worldwide educational environment, the digitalization of education has emerged as a significant trend.

Regarding the trend toward digitalization of education, education that takes advantage of the new opportunities provided by digital technologies is a distinct challenge. Incorporating digital technologies into the learning process has many advantages, one of which is that a teacher can control the practical efficiency of the teaching process, the quality of mastery of educational material, the amount of time it takes a student to complete a task, the level of understanding of new information, and so on, whereas traditional control methods ensure the assessment of "gross" performance (eg based on final grades). Teachers are saving time and money by using digital technology to reduce the amount of paper they use: reports are being replaced by laptops or tablets that contain all of the relevant academic information. Students, it should be noted, reap the benefits as well. Modern digital technologies make it feasible to do any assignment in a group setting, to discuss opinions and ideas with peers, and to produce greater outcomes in a shorter period of time than previously conceivable. Currently, research into educational human resources and their relationship to digitalization and sustainable development is in its infancy, with only rudimentary theoretical models available to guide the field's exploration and progress. The nature of this research is intended to be exploratory in nature, and it will be based on a review of the literature and / or existing data, as well as qualitative methodologies, in order to achieve its goals.

2. Literature review

Several studies have demonstrated that human capital theory and education systems are effective tools for the development of individuals and nations, particularly in developing countries (Burlacu et al., 2018). However, there are ramifications, particularly in terms of policy variations and disparities in educational investment, which are discussed more below. Education systems must be expanded, according to human capital theory, which highlights the need of decision-makers allocating considerable resources to this endeavor. However, while some governments may be hesitant to engage in education, the beneficial returns on this investment will far surpass any expenses associated with this endeavor (Androniceanu & Burlacu, 2017). As a result, many emerging countries have come to recognize that the education system is the most important instrument for the advancement of human knowledge (Burlacu & Jiroveanu, 2012). As a result, they devote a significant number of resources to education, not only to impact people' knowledge and abilities, but also to transfer values, ideas, attitudes, and ambitions that may be beneficial to national growth (Androniceanu & Burlacu, 2017).

We suggest that education be seen as an investment in people, and that the effects of education be treated as a kind of capital. Human capital is the term I shall use to refer to education that becomes a part of the person who receives it. As a

result, Theodore Schultz launched his 1960 essay on "Capital Formation via Education," which was one of the first publications produced because of a study program that Schultz began in the mid-1950s and continued into the 1960s. He was pivotal in the transformation of the concept of "human capital" from a provocative metaphor to a research program in economics that was both large-scale and productive in the late 1950s and early 1960s, thanks to his contributions during this period.

Education, skills, labor productivity, and creativity are all considered to be important components of human development (Burlacu et al., 2021). The approach is to encourage investment in human development by promoting education, skills, labor productivity, and creativity. Combined with physical and natural capital, the ensuing human development may be used to spur economic growth in a variety of ways (Burlacu et al., 2019). To solve this challenge, we must discover the most effective ways to generate human capital with the least number of resources possible by using human development strategies. Human capital must be trained, educated, and developed inside an organization's structure for the organization's production to improve as a result of the knowledge of its personnel (Zidan, 2001).

To enhance a population's productive potential, the theory of human capital assumes that education is highly significant and required (Burlacu, 2009). This premise is supported by empirical evidence. In a nutshell, proponents of the notion of human capital argue that a well-educated population is a more productive population. The idea of human capital, on the other hand, emphasizes how education leads to an increase in the productivity and efficiency of individuals via the development of particular talents, through interaction with others, and through the information gained. Education is viewed as an investment in human capital, which proponents of the idea have found to be as valuable as or even more helpful than physical capital, according to the theory (Woodhall, 1997).

According to Babalola (2003), the rationality of investing in human capital is based on three arguments: the new generation must receive the appropriate parts of knowledge that have already been accumulated by previous generations; the new generation should learn how to use existing knowledge to develop new products, to introduce new processes and methods of production and social services; and the new generation should learn how to use existing knowledge to improve the quality of life for all people in the world (Profiroiu et al., 2020).

Human capital theory, according to Fagerlind and Saha (1997), provides a fundamental basis for substantial public expenditure on education, both in developing and wealthy nations. Investment in human capital has been shown to result in rapid economic growth for the entire society when promoted. Individuals have demonstrated that making such an investment pays dividends in the shape of professional success and personal financial achievement, among other things. Most economists think that a country's human resources, rather than its capital or material resources, ultimately define the type and rate of its economic and social growth. Human resources are the foundation of a nation's economic prosperity (Radulescu et al., 2020). Capital and natural resources are passive factors of

production; human people, on the other hand, are active agents who amass capital, utilize natural resources, establish social, economic, and political structures, and contribute to the advancement of the nation's growth (Profiroiu et al., 2020).

Psacharopoulos and Woodhall (1997) asserted that education plays a vital and substantial role in the economy of a nation, highlighting that the amount of educational spending is a sort of investment in the future of the nation's economy. The rise in these expenditures contributes to the development of human capital, which results in improved production for society as well as enhanced gains for each person. The prospects of finding work in the labor market will be improved as a result of this. Education is a source of economic growth and development since it motivates and informs the person, as well as instructing him on how and why to perform specific acts in the first place (Negescu Oancea, et al., 2020).

Economic growth and poverty alleviation are both dependent on the development of human capital. From a macroeconomic standpoint, the accumulation of human capital enhances labor productivity, enables technological innovation, raises the return on capital, and makes economic expansion more sustainable, all of which contribute to the elimination of poverty. At the macroeconomic level, human capital is seen as a critical component in the creation of goods and services that are a function of the overall output of the economy. An education, from a microeconomic standpoint, enhances the chance of finding work in the labor market and raises one's earning potential (Alpopi et al., 2018). Applied at the micro level, human capital is seen as the component of education that makes a significant contribution to labor productivity and individual wages, while also serving as a critical component of company output. Thus, human capital refers to people's capacity to transform raw resources and capital into finished goods and services, with the general agreement being that these abilities may be taught through the educational system (Cohen & Soto, 2007).

The average number of years of schooling is used as a measure of human capital, according to Trostel, Walker, and Woolley (2002), because it can be used to measure the entire workforce in most countries, is comparable across countries, and is the most used measure of human capital in the research literature. Despite these limits, the average number of years spent in school is still the most reliable and comparable indicator of human capital at the national level, according to the World Bank.

For the world's average level of years of schooling, Barro and Lee (2010) utilized comparable data for the average level of years of schooling, concentrating on the population aged 15 and above. The data collection contains information on 146 nations from 1950 to 2010. A total of 8.12 years of education have been completed worldwide, with males having completed 8.41 years and women having completed 7.84 years of educational pursuit. A person in an industrialized nation has an average of 10.81 years of schooling, but a person in Latin America and the Caribbean has an average of 8.63 years of schooling for males and 8.33 years of schooling for women, according to the United Nations Development Programme.

When compared to underdeveloped nations, industrialized countries make more investments in human capital (Burlacu, 2009). The authors of Barro and Lee (2010) predicted that increasing the average number of school years by one year will result in GDP per capita increasing by 1.7 percent to 12.1 percent, depending on the parameters used.

Cohen and Soto (2007) calculated that school years were profitable at a rate ranging between 12.3 percent and 22.1 percent. It was discovered that a unit rise in the average scores of a country's cognitive tests will result in an increase in the rate of GDP growth per capita by 1.2 to 2.0 percentage points. This was tested by looking at the influence of schooling quality on growth. Furthermore, a one-unit improvement in average mathematics and science scores improves the GDP growth rates per capita by 2.0 points in high-income nations and by 2.3 points in low-income countries, respectively. Overall, studies have discovered that education has been strongly and positively associated with economic growth, and they believe that causality can be traced back to education and growth in accordance with patterns of human capital accumulation.

3. Finding

For the purpose of illustrating not only the evolution of the educational system in Romania and at the level of the European Union, but also the evolution of human capital, we will present data on education expenditures (measured as a percentage of GDP) and on the student-teacher ratio from 2000 to 2019.

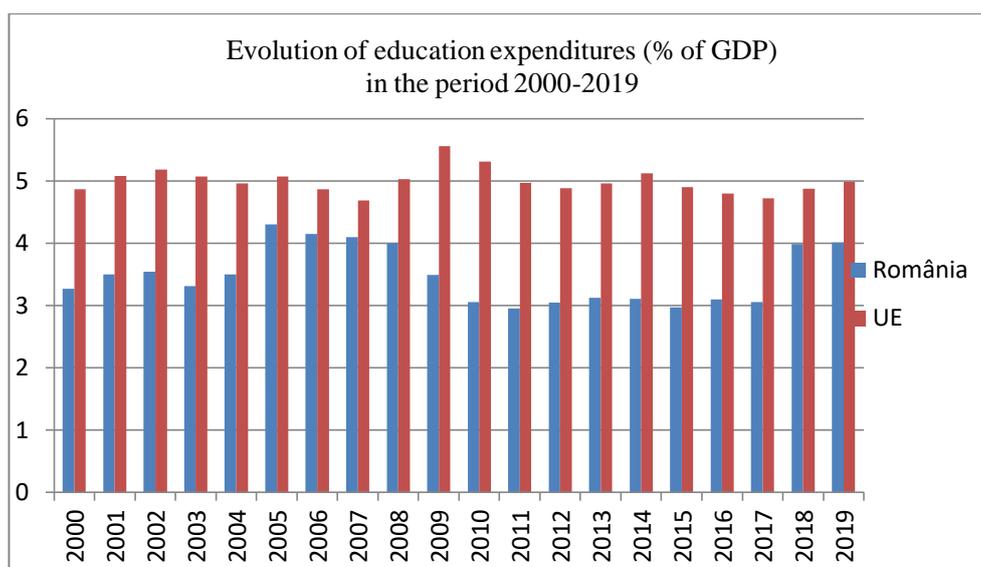


Figure 1. Evolution of education expenditures (% of GDP) in the period 2000-2019
Source: own processing based on data from the World Bank

As can be seen in the figure above, the level of education expenditures (as a percentage of GDP) in Romania is low, owing to the fact that the government allocates insufficient funds from the state budget to support the education sector there. Although education spending was higher before to the beginning of the global economic crisis in 2008, the amount of spending has decreased dramatically because of the global economic crisis (Burlacu & Grosu, 2009).

For the whole time period under consideration, the level of education expenditures (as a percentage of GDP) in Romania has been lower than the average level in the European Union, showing a significant shortfall in the provision of funds to the education system in the country.

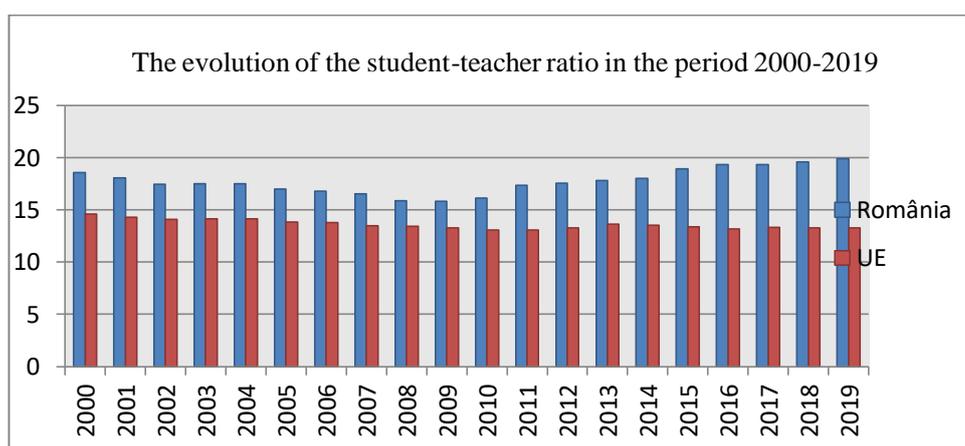


Figure 2. The evolution of the student-teacher ratio in the period 2000-2019

Source: own processing of the World Bank database

During the time period under consideration, it was discovered that the number of students returning to a teacher in a class is steadily increasing, highlighting the severe shortage of teachers in the Romanian education system at the same time that the number of students desiring to receive an education is increasing as well. In order to bring this report into balance, the government should assist those who wish to become teachers by providing them with competitive pay, favorable working conditions, and the assurance that their position would be secure.

4. Conclusions

Comparing the student-teacher ratio in Romania to the ratio at the European Union level, a teacher is responsible for a larger number of students, requiring not only a higher level of concentration but also a higher degree of patience from the instructor. Across the European Union, the typical teacher teaches 15 students, however in Romania, a teacher can teach up to 20 students at one time.

Human capital, we believe, is significantly enhanced by the education system over the long run. As a result, governments around the world should pay special attention to how they distribute funds to education. It should also invest more in teacher training, schools, and the technology that children should have when they have to study at home, as seen by the COVID-19 pandemic that broke out in early 2020, which is a concrete illustration of this.

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