INNOVATION, WORK, SOCIETY

EDUCATION AS A MAJOR CAPITAL AND THE MAIN BASIS FOR THE ECONOMIC POTENTIAL OF THE COUNTRY

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Summary

Based on the works of philosophers of the ancient world and scientists of our time, the article analyzes the need for the existence of two components of its development in any country, namely human capital and financial and political opportunities. Attention is paid to the fact that intellectual potential is a set of resources that include human intelligence and creative ability, with its characteristic educational and qualification indicators. It is proved that higher education graduates are the intellectual core that forms the market of qualified specialists capable of becoming the economic potential of the country. It is shown that the rational use of this potential, in combination with other scientific achievements of society, contributes to the achievement of a new quality of economic development, raising living standards and preserving the environment for future generations. That is, the level of awareness and education of each individual is the molecule that lays the foundation for consolidating the country's competitive influence in the international market. To implement the above, the need for more active use of public administration in the educational process at all levels is determined, the expediency of applying legislative regulation of the process of interaction between higher education institutions and business structures is investigated, both for the establishment of

joint projects and processes of commercialization and reform of education in different countries, including in modern Ukraine, and for achieving positive changes in strategic planning and economic development.

Key words: human capital, intellectual capital, "knowledge economy", the country, economic development, business structures, legislative framework, higher education institutions, educational process, innovations.

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1. Introduction

Ideas and evidence on the interdependence of the development of the country's economy on the intellectual potential of the population have been put forward by scholars since Aristotle, Xenophon, Plato, Socrates and other philosophers of the ancient world. The first scientific ideas were formed under the influence of the Industrial Revolution and at the stage of development of the market economy. When studying the works of A. Smith, later N.G. Mankiw, R.J. Barro and others, modern scientists are inclined to conclude that the knowledge, skills and experience of people are the magical property of society, which, along with machines and technologies, contributes to the advancement and economic growth of countries *(Plaksiuk et al., 2023: 161)*. Later, in the XVI–XVII centuries, the need to develop scientific knowledge as a pillar for the development of the state became one of the main ideas of the first scientific revolution. Among Ukrainian scientists and philosophers, M. I. Tugan-Baranovsky, V. I. Vernadsky and others noted the integral role of intellect in the development of the economic state of the state. From the economic point of view, intellectual capital can be assessed as an intellectual product that has a value. That is, since ancient times, there has been a gradual capitalization of human knowledge, and, accordingly, the commercialization of intellectual labor products, which in market conditions explains the concept of "intellectual capital", which is synonymous with "intellectual potential" *(Semykina et al., 2011: 52)*.

The basis for the development of various alternative concepts of intellectual human capital was I. Fisher's theory of capital. The authors who support his concepts consider human capital more broadly, saying that it is not only a set of knowledge, skills and ability to work, but also physical, psychological, ideological, social and cultural characteristics and abilities of people. However, everyone came to the conclusion that the economic potential of the state is determined by the level of intellectual awareness, and, accordingly, the level of innovative developments and implementation in production.

Accordingly, the development of the level of education, new inventions, and the accumulation of scientific potential led to the growth of intellectual capital as one of the components of the economy of states. This contributed to the consistent growth of the applied value of scientific activity and the spread of respect for the intellectual work of teachers, doctors and lawyers. Understanding this contributed to the growth of educational institutions, and the leadership of states wanted to increase the number of citizens who have the intellectual potential to seek new knowledge and discoveries. Starting in the twentieth century, new secondary and higher education institutions were opened, the number of scientists grew, and the number of new discoveries and innovative implementations increased accordingly. The concept of "academic capitalism" emerged, which was interpreted, for example, as an economic category that reflects

the processes of capitalizing scientific knowledge in order to turn it into a priority resource, the use of which provides competitive advantages. It also includes the process of transforming knowledge into an economic category of goods *(Kuznetsova, 2021: 7–8)*. The era of intellectual assault has begun, characterized by an increase in the number of higher education institutions, an increase in the total intellectual resource of the countries and the entire planet and the active influence of such a resource on the development of both the economy of enterprises and the economy of entire countries.

However, today education in Ukraine requires a transformationally updated connection with the modern needs of entrepreneurs and manufacturers, as well as the requirements of the economy and global trends *(Kyzym et al., 2021: 15)*. Therefore, it is necessary to carry out a systemic reorganization in the field of education, science and innovation to ensure the proper quality of education that meets the needs of business for quality developments in basic and applied sciences, as well as to integrate higher education and science into the development of the country's economy.

Since the beginning of the twenty-first century, the situation has changed, and higher education institutions have saturated the market and started to compete for further business. Today, quality education is recognized as one of the key indicators of a high standard of living, an important means of ensuring social and cultural harmony, and an engine of economic development. This is emphasized both at the international and national levels *(Timchenko, 2013: 296)*.

The modern competitiveness of educational institutions is almost identical to the usual competition of enterprises in the market, where the advantage is achieved exclusively through constant and systematic innovations covering all aspects of scientific and methodological activities, including administrative and management personnel *(Akmen et al., 2022: 137)*. The formation of competitive advantages of educational institutions as a sector of the economy is based on the efficient use of all available resources, both financial and material, and intellectual. Therefore, a harmonious combination of educational resources with business needs is particularly relevant, which contributes to the development and realization of intellectual potential. This potential, if properly motivated, becomes an inexhaustible source for sustainable economic development of the state.

2. Interconnection of economic and business development with educational institutions and the level of knowledge of the population

It should be noted that the role of education and innovation in creating a developed knowledge-based economy is central in the modern world, where information and technology are becoming the main drivers of progress and growth of the state's potential. In other words, there is a situation where the main factors of production and its productivity depend on the level of knowledge and skills, the amount of automation and the speed of obtaining the final product, i.e., are determined by the level of innovation. Accordingly, any entrepreneur understands the dependence of economic growth on the accumulated and utilized intellectual capital, namely the level of knowledge and intellectual capabilities of professional employees. It is the level of quality of specialists as the future intellectual capital in business that should be the basis for the work of higher education institutions and determine their competitive level in the market of educational services.

Accordingly, a relationship can be established between business structures and higher education institutions with a common goal of training a knowledgeable, intelligent, and

responsible decision-maker. The more applied knowledge a student receives during his or her studies, the greater his or her intellectual capital, the faster the transformation into material resources (tangible capital), which is the basis for future business profits and the formation of taxes to replenish the country's treasury.

This combination is a successful economic symbiosis and is known as the often-used term "knowledge economy." According to UN experts, the knowledge economy is a system in which knowledge is created, disseminated and used to stimulate economic growth and increase the international competitiveness of a country. They emphasize the importance of the amount of knowledge as a key factor in development and its contribution to the information enrichment of all participants in economic processes *(Novikova et al., 2018: 509)*. In other words, the knowledge economy is based on the acquisition and further application of knowledge as the main source of advantages in competition and further development of education and educational institutions. If we analyze the components of such a symbiosis, we should highlight the following key positions, the role of which is decisive in the evolution of knowledge and progress towards economic development (Fig. 1). The knowledge management paradigm is constantly evolving and adapting to modern challenges, integrating the latest professional developments, promising criteria for the development of various specialties and new opportunities for solving complex problems.

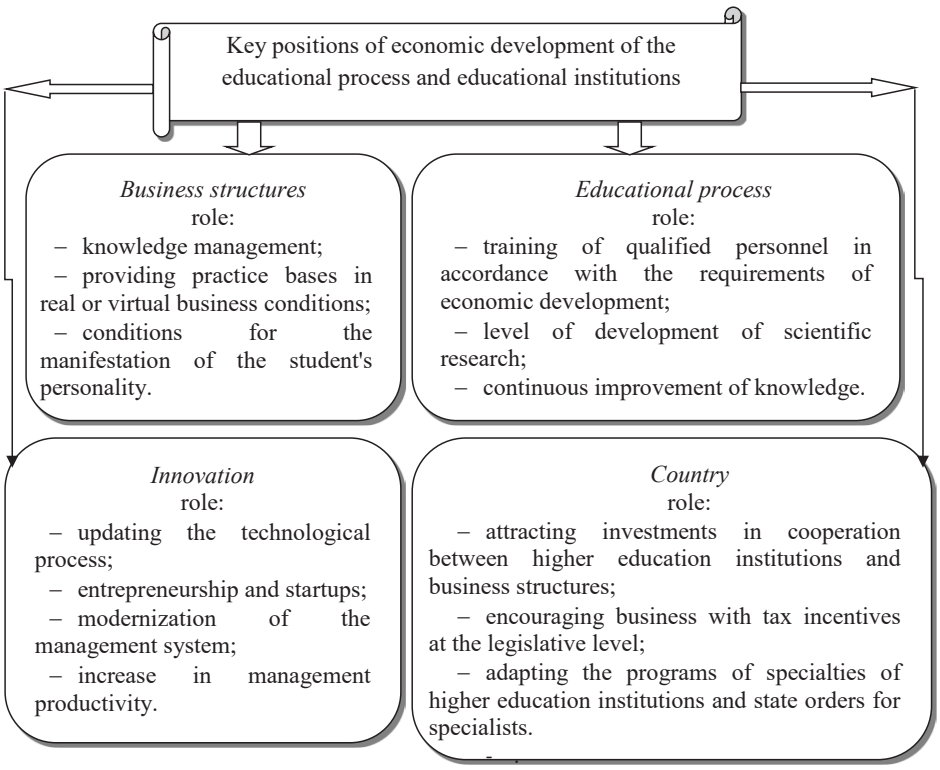

Fig. 1. Key positions for the economic development of the educational process and educational institutions

2.1. The educational process and its interaction with business and the economy

The educational process is a key element in the formation of the knowledge economy, as it contributes to the development of human capital, which is the main resource of the economy. High-quality education creates the conditions for the development of critical thinking, creativity, the ability to innovate and adapt to rapid changes that are essential for maintaining competitiveness in the business environment.Considering the position on the training of qualified personnel in "Entrepreneurship and Trade", it should be noted that it is specialists with deep knowledge in their field who are able to generate new ideas, products and services, which increases competitiveness and promotes economic development.

In order to be competitive and economically developed, universities combine the functions of educational institutions and research institutes, become centers of innovation, creating not only a basis for acquiring new knowledge, but also for developing new technological solutions that, when applied in industry or economic activity, contribute to the development of the country *(Akmen et al., 2022: 31).*

Analyzing the needs of the economy and business in the training of graduates of our faculty, in particular specialists in business and trade, it should be noted that the rapid development of information technology, globalization of the labor market, growing competition and commercialization necessitate constant updating of knowledge, skills and abilities of specialists. Accordingly, higher education staff should reorient the teaching process so that graduates have real chances of employment at enterprises of various forms of ownership. This position is supported by experts from business structures and employment centers, as they are the ones who are most familiar with the realities of the labor market and know how often young people face difficulties in finding a suitable job after graduation. Employment centers should be a link between the labor market and higher education institutions, as they provide a demand for specialties, skills, and knowledge that are in demand in business and government agencies. Employment centers can direct already trained professionals to additional short-term courses to increase their educational and professional potential in line with the needs of the economy and business.

This creates a certain impetus for organizing the process of continuous learning and acquiring additional competencies, such as a foreign language, web technologies, knowledge of the industry's regulatory and scientific framework, modern professional developments and promising criteria for the development of the professional field.

2.2. Innovations in the educational process, their interaction with business and the economy

The innovations are another special element in the knowledge economy. They ensure the development of new processes, developments and the introduction of new products, services and business models that contribute to productivity and value creation. Innovations in the knowledge economy can be seen in the introduction of new information technologies, automation, and digital solutions that help to improve the efficiency of production and service delivery.

Also, in terms of the development of the economic side of the educational process, it should be noted that education supports the development of entrepreneurial skills and subsequently contributes to the emergence of new innovative companies and startups, which, thanks to the acquisition of professional skills (in the case of close cooperation between educational institutions and business structures), even in the absence of large investments, have great potential for development and growth. Such companies have great prospects for rapid adaptation to market changes and the creation of a product in demand in the market.

The increase in management productivity is driven by innovations in optimizing cooperation between company employees, restructuring the process of interaction and management decisions to reduce overall costs and increase resource savings. On the other hand, the increase in productivity is characterized by the optimization of technological processes in production, which aims to improve product quality.

The most productive and promising mechanism is the relationship between education and innovation, as education and educational institutions should be the basis for the emergence and development of innovations, providing training for proactive professionals capable of developing new ideas and technologies. In turn, innovations stimulate demand for new knowledge and skills, which requires further development of educational programs and systems. This cyclical process contributes to sustainable economic growth, as countries that invest in education and science tend to have higher rates of economic development.

2.3. The role of the state in the development of the "knowledge economy" and support of higher education institutions

A number of scholars believe that the innovative economy of a country can develop on the basis of the legislative framework of the state and through the efforts of human capital, which becomes an integral determinant of economic growth *(Kolomiiets, 2018: 143).* After all, the costs of investing in the educational development of human capital are borne by both the holders of this capital and the entire society through the financing system introduced and organized by the state as a stakeholder in this process.

Analyzing the legislation of Ukraine, it should be noted that at the beginning of the development and formation of Ukraine as a country, the development of education was identified as a priority area that affects the development of the economy. Thus, according to the previous Law of Ukraine "On Education" (1991), Article 61, paragraph 2, stated that the budget allocations for education should be at least 10% of the national income (approximately 8% of GDP). However, for three decades, at the level of local budgets, this norm was fulfilled only by 3.2% to 5.5%, while in the state budget, the figures were even lower, with education spending not exceeding 2.7% *(Semenets-Orlova, 2018: 297).* Together with the lack of effective state support for education and legislative regulation of relations between business structures and higher education institutions, the situation has had a negative impact on the financing and development of science and the educational process.

The current legislative framework regulating the educational process contains norms that are closer to European standards, for example, it provides for the possibility of obtaining and awarding several additional professional qualifications, which are based on the introduction of elective educational components; the possibility of studying in interdisciplinary educational programs. Also, a higher education student who has completed certain educational programs may be awarded two professional qualifications *(Zakon Ukrainy № 3642-IX, Zakon Ukrainy № 2145-VII).* However, no legislative changes have been adopted to stimulate mutually beneficial cooperation between commercial entities and higher education institutions.

Successful examples where the country actively supports higher education institutions are South Korea and Finland. In these countries, higher education institutions successfully develop and benefit the economy of the country, as there is support and active investment in education and science at the legislative level. Educational systems aimed at developing innovative potential show high economic results and ensure competitiveness in the global market. Such countries actively support scientific research, develop high-tech sectors, and stimulate innovative entrepreneurship.

3. Analysis of economic benefits from investments in education and their impact on productivity and economic development

The active advancement of society, which occurred due to breakthroughs in scientific and technological developments, has brought about changes in the social status of society and economic development of states Scientific and technological progress has also influenced the formation of human capital theory as an independent scientific concept. The second half of the twentieth century saw a demand from countries around the world for knowledgeable, highly skilled workers, which determined the immediate need to increase the importance and popularization of education among the population. A qualified person with a higher or secondary education has become in demand in the labor market, and investing in employee training has become economically profitable.

Today, the role of any European country, including Ukraine, in the formation and development of human capital is significant. Countries introduce incentive and compulsory measures for its growth. Compulsory measures include compulsory schooling and preventive medical procedures, such as vaccination. The main incentive measures are those that the state implements through the tax system and subsidies, as well as the regulation of prices for resources needed for investment in human capital. After all, it is the level of development and intelligence of human capital that can determine the level of development of a country.

An important task for stimulating investment in human capital is to determine the specific effects and levels of efficiency for the state, the enterprise, and employees. The economic effect for the enterprise is calculated as the difference between the additional income from investments and their costs for the reporting period. However, it is difficult to determine the exact impact of these investments on profits. Therefore, the purpose of assessing the efficiency of investments is not only to calculate the economic effect, but also to confirm the possibility of achieving it.

One way to demonstrate the economic benefits of business investment in education, training and skills development, as well as the impact of this investment on productivity and economic development, is to engage higher education institutions in cooperation under the concept of clustering. This concept focuses on close ties between companies that are united in a network structure for the productive production of any products and services with the active use of each other's innovative developments.

At the same time, the focus is on innovations in high-tech sectors, where the research sectors of higher education institutions are useful as partners in generating new ideas, implementing experimental developments, developing and improving technologies and products. That is, the scientific potential of educational specialists is becoming a necessary link in the development of a technologically competitive policy, where enterprises with different levels of investment and higher education institutions as centers of scientific knowledge actively cooperate.

Verkhovna Rada of Ukraine adopted the Law on Supporting Research in Higher Education Institutions *(Zakon Ukrainy № 9600)*, which provides new incentives for teachers to actively conduct research, which should involve interested and knowledgeable students. After all, it is new developments that contribute to the development of innovative innovations in production and lead to the growth of the national scientific potential, which is the identifier that determines the level of development of the country.

4. Conclusions

Thus, it can be determined that at the present stage of society's development, the problems associated with the development of human intellectual capital have gone beyond

individual significance and are increasingly gaining importance and significance for all levels of commercial and governmental structures, and accordingly shape economic development at the state level.

The knowledge economy requires a close relationship between education and business structures. Education prepares people to actively participate in innovation processes, and innovation, in turn, increases the importance of education by stimulating demand for new knowledge and skills. Investments in education and innovation are becoming critically important for countries seeking to increase their economic potential and strengthen their position in the global economy.

It should be noted that our country has made significant progress towards reintegration into the European Education Area, but progress towards the realization of the concept of "knowledge economy" is insignificant. Education in our country is not considered as a capital and a basis for the growth of the economic potential of the state, so we should try to involve the state bodies regulating the activities of higher education institutions, in particular, in solving this problem: The Ministry of Finance of Ukraine, the Cabinet of Ministers of Ukraine, the Ministry of Education and Science of Ukraine, regional state administrations, the Ministry of Economy and Trade of Ukraine, and local governments.

The costs of educational investments should be borne by both the population of the country and society through the system of legislative support and state funding of education. The return on these investments will be manifested in increased future labor productivity, higher incomes, and, consequently, increased tax revenues, which ensures the economic effect of such investments. Thus, the efficiency of national economic development depends on the amount of investment in education.

This confirms that the quality of knowledge has a direct impact on economic growth, competitiveness, and the overall well-being of the country. Investing in education in any industry is strategically important for sustainable economic development.

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