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**HUMAN CAPITAL AND HUMAN POTENTIAL:
THE QUESTION OF INTERACTION IN CHANGING SOCIETY**

The article deals with the issue of relationship between economic and educational systems. It focuses on the features of this relationship at the time of transformational processes in society whose existence is based on human knowledge and the ability to apply it in real life. The author underscores that knowledge is a component of “human capital” and “human potential” concepts.

The purpose of the article is to describe interaction between the concept of “human capital” and that of “human potential”.

To accomplish it, the author set the following objectives: to describe the content and the meaning of the term “human potential”; to describe the components of accumulated human potential; to focus on the knowledge component as one of the main components of pedagogical theory and to raise issues of interaction of “human capital” and “human potential” in the context of modern society.

To research the issue the author used the following methods: the method of collection and analysis of literary sources related to the topic, the method of summarizing data, the method of systematization, and the method of synthesis of theoretical positions.

The author concluded that the accumulated human potential, whose components are natural human potential and human capital, is determined by the combination of internal and external factors (natural predispositions acquired in the process of developing and improving personal and professional qualities, investments into persons and the enterprise). Knowledge itself is capital only when investing it into the specific production or sphere can bring economic benefits for its holders and ensure efficiency of the enterprise as a whole.

The prospects for further research lie in the study of conditions that educational institutions create for further accumulation of human potential by students.

Key words: knowledge component, knowledge economy, development, professional qualities, employee.

Introduction

The human civilizations is facing unprecedented challenges – financial, economic, medical, social, environmental and so on – driven by accelerating globalization and a faster rate of technological developments. At the same time, those forces are providing us with new opportunities for human advancement and development. The future is uncertain and we cannot predict it; but we need to be open and ready for it.

Threats, risks and challenges on the global community agenda change dramatically. Until recently, these were the threats of nuclear conflicts, technological disasters, terrorism attacks, climate change, lack of food and drinking water etc. In the Human Development Report 2019 published for the United Nations Development Programme (UNDP) an urgent problem is designated as inequalities in income and wealth, gender, social

norms and power, environment and many others aspects of human being [Human Development 2019 : 352]. Today, the most pressing issue in the world is the pandemic of coronavirus that impacts billions people and has catastrophic consequences for the economy.

This makes us radically rethink the role and importance of science and education in the modern world, the responsibility of politicians, the academic community, and representatives of the media, the general public and each person for the results of their activities.

Man is the object of study of various sciences and, accordingly, is studied in different planes. In the context of a particular discipline, psychological (based on individual characteristics), social, and economic aspects of his life are subject to understanding. These aspects have a close relationship with the philosophy of his being

and the processes of formation of the necessary basis in the form of knowledge, skills, experience, competencies, which are considered by pedagogical science. Their relevance to modern needs is the basic platform, the presence and formation of which will create potential opportunities for self-realization of the individual.

Self-realization is possible on the basis of a well-organized system of human knowledge, that is considered as a component of human capital by classical scientists and modern researchers.

That is why the following works became the foundation of our research:

- R. Solow [Solow 1957] and J. Mincer [Mincer 1958], who introduced the concept of human capital into academic discourse;

- Nobel Prize winners in economics T. Schultz and G. Becker [Schultz 1961; Becker 1964], who became the founders of the theory of human capital;

- J. Mokyr [Mokyr 2004], who studied the historical origins / roots of the knowledge economy;

- foreign scientists who studied issues related to the development of human capital in the conditions of modern development of society [Goldin 2016; Pettinger 2019], its importance in the formation of future generations [Amadeo 2019], also related to the growth of the human capital index in various countries [Kraay 2018; World Development 2018; Yarova 2018].

The works of the authors of the post-Soviet period presented in our study are devoted mainly to the interpretation of the “human capital” concept in the context of their own research. We need them to show the variety of formulations of this concept in the scientific discourse.

The purpose of the work is to describe the interaction between the concept of “human capital” and the concept of “human potential”.

To accomplish it, the author set the following objectives:

- to underscore the importance of relationship between economic and educational systems by generalizing the formulations of the “human capital” concept in classical works and in the works of modern foreign authors and scientists from the CIS countries;

- to describe the content and the meaning of the term “human potential”;

- to describe the components of the accumulated human potential;

- to focus on the knowledge component as one of the main components of pedagogical theory and to raise issues of interaction of “human capital” and “human potential”.

Materials and methods (methodology)

To research the issue we used the following methods: the method of collection and analysis of literary sources related to the topic in order to form a holistic view of the level of development of this problem, the method of summarizing data to form own view and set a research goal; the method of systematization in the study of the “human capital” concept in classical and modern sources; and the method of synthesis of theoretical statements in order to describe the relationship between the term “human capital” and the term “human potential” and to highlight the components of the accumulated human potential.

Results and discussion

Dynamics of global changes in the world economy and, as a result, in social field and way of life have brought to understanding of education value as a strong trigger of regulation and implementation socio-economic challenges, being in front of society. Evidence of that fact is human activities—one of the effective factors of their development and subsequent economic increase, due to basic training and self-improvement, was confirmed by researches of World Bank. According to analytical reviews was made a conclusion that factors of economic increase as a percentage are [Formation of 2003]: natural resources (20%), physical capital (16%), human capital (64%) which formation and development is determined by level of education, human ability and opportunity to use them in different fields of life activity for satisfaction of own needs and needs of society.

As C. Goldin is rightly noted the concept of human capital goes back at least to Adam Smith. In his fourth definition of capital he noted: “The acquisition of ... talents during ... education, study, or apprenticeship, costs a real expense, which is capital in a person. Those talents are part of his fortune and likewise that of society”. But the earliest formal use of the term “human capital” in economics is probably by Irving Fisher in 1897 [Goldin 2016 : 55–86, 56–57].

At the end of 1950, the concept of human capital began to gradually enter into academic discourse thanks to the works of R. Solow “Technical Change and the Aggregate Production Function” (1957) [Solow 1957 : 312–320] and J. Mincer “Investment in Human Capital and Personal Income Distribution” (1958) [Mincer 1958: 281–302]. In 1961 T. Schultz published his classical work “Investment in Human Capital” [Schultz 1961 : 1–17]. In 1964, Nobel Prize winners and University of Chicago economists Gary Becker and Theodore Schultz created the theory of human capital. Becker realized the investment in workers was no different than investing in capital equipment, which is another factor of production. Both are assets that yield income and other outputs. Becker’s research focused on education. His found that 25% of the rise in U.S. per capita incomes from 1929 to 1982 was due to increases in schooling [Amadeo 2019].

Very close to this reasoning is the approach proposed in 2004 by J. Mokyr in the work “Gifts of Athena: Historical Origins of the Knowledge Economy” [Mokyr 2004 : 376]. In knowledge, the focus of attention has shifted from the question “What is this?” looking for the answer “How does it work?”

Today the index of human capital considers five indicators: the survival rate of children under five years old; survival rate of adults from 15 to 60 years old; the duration of school years for children; quality of education; percentage of children without developmental delays. “Human capital is the health, skills, knowledge and experience of the population. Investing in people in the form of food, health care, quality education, creation of jobs and professional development helps to develop human capital, which is crucial for elimination of extreme poverty and forming a more socially cohesive society,” – the World Bank said [Yarova 2018].

There is another definition. According to the OECD, human capital is defined as: “the knowledge, skills, competencies and other attributes embodied in individuals or groups of individuals acquired during their life and used to produce goods, services or ideas in market circumstances”. Factors that usually determine human capital: Skills and qualifications; education levels; work experience; social skills – communication; intelligence; emotional intelligence; judgement;

personality – hard working, harmonious in an office; habits and personality traits; creativity; ability to innovate new working practices/products; Fame and brand image of an individual. e.g. celebrities paid to endorse a product; geography – Social peer pressure of local environment can affect expectations and attitudes [Pettinger 2019].

Formed view on human nature at the same time as an object of investment and a subject of activity, possessing potential and ability to transform obtained knowledge and skills in order to transform own lives and the lives of society, determined the emergence of the definition of “human capital” [The economics 2006 : 34]. At the same time, the essence and content of the concept of human capital is very complex, multifaceted and contradictory. Lack of clear understanding of the structure of human capital, its components, their interaction and mutual influence, leads to its understanding of how:

- generalized characteristics (psychological, medical, cultural, intellectual, professional) and qualities of an individual that give the opportunity to be competitive [Roschina 2008 : 4–7];

- complex of components (health, motivation, ability, knowledge), have formed or accumulated during the human life [Dobrinin 1999 : 164–170];

- conglomerate of intelligence, education, learning, experience, energy, initiative, habits as factors that determine and have a significant impact on the cost of marginal product cost [Frank 2007 : 51];

- a wide range of personal qualities, which presence and level of formation provides a certain income in various areas of life [Erfurt 2009];

- investing in a process of increment of both mental and physical person’s abilities [Lucas 1988 : 17–19];

- whole consisting of a certain number of components, among which: innate abilities, motivation, abilities, qualities of an individual, knowledge, level of education and qualification, work experience, health status, ability to create personal and public benefits, generate income [Khannanova 2009];

- investments of capital which purposeful nature of the investment is ensured by the sum of the skills generated by the individual on the basis of the obtained knowledge that they can realize due to their abilities and qualities (intellectual, psychological, physical) [The economics 2006 : 49];

– component of intellectual capital [Doroshenko 2007];

– some combinations of groups factors determining character and course of work among which: individual's ability to obtain knowledge, his desire / intention to use and share them together in order to improve the society and man's welfare and quality because of which this activity is carried out [Phitzenz 2006];

– indicator of the highest productivity of human labor in society, training and education, science, culture, intellectual property, informatization of life [Korchagin 2004 : 83–90].

Under the definition of “human capital” researchers usually understand the type of capital, the characteristics of which for a particular worker can be physiological, personal, professional competence, as well as the level of his psychological development [Maklakova 2010 : 63].

Its distinctive features, according to the views of the classics, are as follows:

– difference and similarity with the physical in the context of the processes of aging, and also the necessity for maintenance, care and repair; inseparability from a person as his carrier; the ability to increase efficiency from various types of individual activities in the economic and non-economic fields [Becker 1964];

– form of capital reproduction that may become obsolete, depreciate and deteriorate due to various reasons (including unemployment, which reduces the use of skills that were previously obtained by employees) [Schultz 1961].

In general, analysis of economists' researches who studied problems of human capital showed the relationship of the content of this definition with the education, abilities, skills, and human knowledge [Garavan 2001], their accumulation in the process of receiving education by an individual at various levels [De la Fuente A 2002], their behavior, attitude and competencies [Rastogi 2002], features which allow them to produce goods and services [Thurow 1970], creating new knowledge and constructs [Romer 1990], and social, economic, personal well-being [Rodriguez 2007] based on available knowledge.

The emphasis on the knowledge component of human capital has led T. Shultz to the conclusion that having a useful skills and knowledge does not always allow us to perceive them as a form of capital,

as well as recognizing this capital as “an important part of the product of a conscious investment” [Schultz, 1961]. According organization of production, management and modern researchers [Managing Human 2002 : 110] the difference in employee productivity is explained by different levels of investment in them, after all, an interest in investing arises on the condition that much greater profit is obtained from investing in such resources.

This position again confirmed by the T. Shults's views [Schultz 1961] that human resources have quantitative and qualitative characteristics. Quantitative characteristics include: the percentage of people employed in production; the length of time required completing a specific task; employees doing “useful” work. Qualitative characteristics are represented by knowledge, skills and “similar attributes”, which, according to the author, influence on the individual's ability to realize activities productively. The costs associated with their expansion create a positive rate of return and increase the value of a free person work.

T. Shults [Schultz 1961] also paid attention on the fact of insufficient investment in human skills and knowledge in comparison with investments in inhuman capital, recognizing this discrepancy as a rule rather than an exception: “Where the capital market serves human investments it is subject to more imperfections than financing physical capital”. But the high level of knowledge among subjects of labor has always been recognized as an indicator of the economic power of a nation and at the same time, as a means of stimulating its economic increase [Kiker 1966 : 85].

In a similar vein, studies of modern authors have been performed. In their writings is affirmed the idea that people investing in their development, have the opportunity to expand the range of their choice in various areas of their life and improve the level of both personal and social well-being as a certain system consisting of economic, political, environmental, social, spiritual, psychological components and emphasis on which was made in the A. Klymonova's work “Welfare of the population as a target guideline of the state: the nature, elements, factors of welfare” [Klimonova 2016 : 62]. We agree with the position of a researcher who considers this category through the prism of qualitative and quantitative characteristics. Qualitative characteristics reflect the nature

of the relationship between objects and subjects of labor and the degree of their satisfaction with life, while quantitative (economic) characteristics allow us to judge its level. Among the markers of welfare, the author points out the phenomena of wealth and poverty, this can be considered in the context of the action numerous factors. We focus on the characterization of social and psychological factors presented in this work [Klimonova 2016 : 64], which tend to appear on two levels: macro- and individual. So, the appearance of the social factor at the macro level reflects the level of development healthcare and education systems, as well as the general system of moral values and traditions of the population. On an individual level, it is an indicator of a person's mentality, his social status, the quality of his education, his profession and the degree of proficiency in professional competencies, occupation, and qualifications.

The action of the psychological factor on an individual level characterizes the personal qualities of a person, the formation of his life position, ambitiousness and consumer behavior.

As we see, the display of the relationship of the presented factors indicates the ability of the system to develop through acts of the man's diverse development, the basis of which is knowledge.

We support the author's convictions [Klimonova 2016 : 65] that a low level of population knowledge leads, respectively, to a low level of well-being and initiates the display of the next threats in society: economic (decline in economic activity and economic growth in general); socio-political (dissatisfaction with government, escalation of social conflicts, increase of crime, the risk of coups and revolutions); demographic (reduction in fertility, decrease in population and life expectancy, deterioration in the educational level of the population); information technology (difficulty in accessing to the information for population, reduction in funding).

As known, various types of activities are source of knowledge, as the basis of human capital, a means of developing its potential and form of investment. So, T. Schultz [Schultz 1961] paid his attention on: the functioning of medical institutions and the scope of their services, including expenses affecting person's vitality, their energy, endurance, life expectancy in general; multilevel formal education (primary, secondary and higher

education); training employees at the workplace in the field of industrial production through investment companies; training programs, including continuing education programs for adults, which is not related to the activities of firms, especially in the field of agriculture; population migrations caused by the need for employment.

We would also like to draw attention to the fundamental work of R. Floud et al. "The Changing Body: Health, Nutrition, and Human Development in the Western World since 1700" published in 2011 [Floud 2011]. The authors based on research and comparative analysis on large historical material showed the relationship of biological, demographic, and economic variables from fragmentary data and long-term trends in nutritional status, mortality, and economic growth.

In G. Becker's classic study [Becker 1964] depicts the nature of changes that are direct consequence of investing process in the development of human skills and knowledge. Scientists draw an analogy between investments in equipment and the business sphere and investments in training and education of an individual. Proving the need for investment in human education and considering their economic efficiency, the author points out on the existence of a close relationship between the age, experience, and the level of received income.

Improving physical and emotional health is also recognized by G. Becker [Becker 1964] as one of the effective methods investing in human capital. Besides, an indication that emotional health is an important determinant of his income is an incontrovertible fact in the modern world. Weighty arguments, proving the need for investment in health is presented in the documents of the Europe Regional Office of the World Health Organization (WHO) "Health 2020" [Health 2020].

As modern researchers emphasize [Managing 2002: 110], investments related to the workers' education and training without giving up work, as well as investments in the field of health care and in areas involving great employment opportunities for future employees, are considered as long-term investments, which in the future can bring significant profit.

The process of maximal knowledge using, available to employees, or possible largest number of employees with such knowledge, in modern sources [Stewart 2007 : 135] received

an interpretation of a possible way to increase human fund.

Understanding of human capital as a set of means invested in the process of development in order to build up human potential [Schultz 1961], and T. Shults point out [Schultz 1961] to the well-known fact, that the innate human potential is determined by the set of human genes that he received from birth, has led us to the need to give some explanations of the development from the attitude of psychological and pedagogical disciplines.

In pedagogical science, issues of human development (including his innate and acquired qualities) are considered through a triad of factors/causes proposed by J. Schwanzara [Schwanzara 1978 : 17]. Among these factors which influence on individual development process, researcher points to environment, parenting and heredity, offering as an ideal option to consider them as sides of an equilateral triangle, the basis of which is heredity. Focusing on the fact that none of these factors can be considered outside interaction with others, the author pays attention to their possible nonequilibrium mutual influence, the consequence of which is the inharmonious man's development. In this way, inherited from parents' predispositions which may take shape of ability or may not, get its bright color under the influence of two other external causes – education and the environment.

Psychologist V. Petrovsky [Introduction into Psychology 1996 : 468–469, 473] point out the non-identity of abilities with knowledge, skills and abilities of a person, emphasizes that they act as opportunities for acquiring appear in activities. Considering issues related to the qualitative and quantitative characteristics of abilities, author focuses on the conditions that allow detecting them [Introduction into Psychology 1996 : 469], among which he emphasizes the interest of the family, school, work collective in their development, organization of the training process and subsequent activities in the work collective.

The process of developing abilities as “properties of functional systems” that allow a person to realize individual mental functions that have an individual degree of display and are expressed in a qualitative singularity of the processes of development and implementation of activities [Pedagogics 2005 : 546] can be “strengthened” by the economic

component through appropriate investments in people [Schultz 1961] in the process of performing a specific socially significant type of activity.

Analysis of a wide range of human activities has shown that on probation all abilities can be combined into two large groups - general and special [Introduction into Psychology 1996 : 475]. Accordingly, their implementation is ensured by general and special personality traits. Particular interest for us represent general mental abilities and such qualities of the mind as activity; systematic; criticality; speed of mental orientation; width depth and independence of thinking; analysis and synthesis; the argumentativeness and evidence necessary for implementation various activities [Krutezky 1972 : 141; Pedagogics 2005 : 546]. Naturally, these opportunities and their subsequent development are coupled with external factors, among which – training and education that accompany the individual in the family, at the enterprise, in society in general [Becker 1964].

The mental abilities of a person obtained and developed by him can also be considered as human fund [Dolan 1992].

In the context of the analysis T. Shults's [Schultz 1961] and G. Becker's [Becker 1964] works particular interest for us is presented vision of the concepts correlation “human potential” and “human fund” by researcher E. Maklakova [Maklakova 2010].

The author claims that human potential (natural) with investment in a person (human fund) is an accumulated human potential which can be implemented in the field of family relations, social and labor activities [Maklakova, 2010 : 59].

In the context of the individual's labor activity, the emphasis is on the characteristics of labor potential, among which: qualification potential, reflecting the level, quality and level of preparedness of the employee for work; psychological potential, including individual's particular world outlook the level of his mental development and state of mental health; physiological potential, which is an indicator of the general human health [Maklakova 2010 : 62] the features of which can be endurance, ability to work, effective implementation of their labor functions and responsibilities, providing the society and individual's social well-being.

Following E. Maklakova's logic of the research and basing on the T. Shults's and G. Becker's key

points of the study of human fund we think that components of the accumulated human potential are: innate potential; labor potential, including physiological, psychological and qualification potentials-components; investments invested in the development of the individual.

The components of the accumulated human potential in graphical form can be presented in Fig. 1.

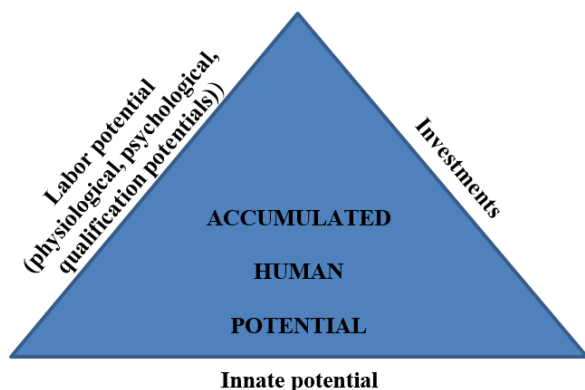


Fig. 1. Components of accumulated human capital

In our work, the qualification potential as part of the labor potential of the employee, we propose to consider through the prism of the definition of “qualification”.

In the interpretation of this concept [Short Pedagogical Dictionary 2007 : 55; Pedagogics 2005 : 230–231; Pedagogical Dictionary, 2005 : 57] the main emphasis is on the human abilities which level of development allow him as an employee to carry out certain functions of a certain level of difficulty in a particular type of work. Thereby, the level of this abilities development determines the level of individual’s preparation for any type of labor.

Abilities and employees’ skills formed in the process of activity determining their level of qualification besides such indicators as work experience in the context of specialty, age, level of education, resources invested in staff’s development according to modern scientists [Tuguskina 2009 : 43], are indicators that reflect

the process of studying and evaluating human fund. For example, evaluating profits made by investing in staff, researchers [Lesnikov 2009 : 47] focus on two aspects of these investments: social, interesting to subjects of labor and commercial, reflecting the interest of the enterprise.

Conclusions

All of the above allows us to make the following conclusions.

1. Studying the relationship between economic and educational systems is complex and multifaceted. The features of this relationship are the following: on the one hand, education is the main factor in the economic development of the state, on the other, it is a source of scientific knowledge and continuous growth of people.

2. The relevance and value of such a product as knowledge are determined by the expectations of employers to obtain economic benefits from its use and determines the amount of investment in the development of human potential in the modern labor market.

The development of human potential is based on expanding the spectrum of its use by an individual and such traits of his personality that allow carrying out certain types of professional activity.

3. The accumulated human potential whose components are natural human potential and human capital, is determined by the combination of internal and external factors (natural predispositions acquired in the process of developing and improving personal and professional qualities, investments into persons and the enterprise).

4. Knowledge itself is capital only when investing it into the specific production or sphere can bring economic benefits for its holders and ensure efficiency of the enterprise as a whole.

Skills and abilities of an individual formed on the basis of knowledge acquired by him represent a vivid picture of a person as an employee and are one of the criteria for assessing his capabilities and an ability to perform certain types of professional activity.

ЛІТЕРАТУРА

1. Введение в психологию / под общ. ред. А. В. Петровского. Москва : Академия, 1996. 496 с.
2. Дорошенко Ю. А., Лебедев О. В. Человеческий капитал как приоритетный объект инвестиций. *Креативная экономика*. 2007. № 5. С. 11–18.
3. Здоровье-2020: основы европейской политики и стратегия для XXI века. URL: http://www.euro.who.int/__data/assets/pdf_file/0017/215432/Health2020-Long-Rus.pdf (дата звернення 09.09.21).
4. Климонова А. Н. Благополучие населения как целевой ориентир деятельности государства: сущность, элементы, факторы благополучия. *Социально-экономические явления и процессы*. 2016. Т. 11. № 12. С. 60–67.

5. Краткий педагогический словарь : учебное справочное пособие / Г. А. Андреева, Г. С. Вяликова, И. А. Тютюкова. Москва : В. Секачев, 2007. 181 с.
6. Корчагин Ю. А. Человеческий капитал и процессы развития на макро- и микроуровнях. Воронеж : ЦИРЭ, 2004. 122 с.
7. Крутецкий В. А. Основы педагогической психологии. Москва : Просвещение, 1972. 184 с.
8. Лесников И. Н. Инвестиционная составляющая в системе сбалансированных показателей оценки персонала. *Управление персоналом*. 2009. № 6 (206). С. 47–50.
9. Маклакова Е. А. Человеческий капитал: понятие, оценка, учет. *Вестник ЛГУ им. А. С. Пушкина*. 2010. № 1. С. 56–69.
10. Педагогика: Большая современная энциклопедия / сост. Е. С. Рапаевич. Минск : Современное слово, 2005. 720 с.
11. Педагогический словарь / Г. М. Коджаспирова, А. Ю. Коджаспиров. Москва : Академия, 2005. 176 с.
12. Рощина Я. М. Психологические составляющие человеческого капитала как фактор экономического поведения. Москва : ГУ ВШЭ, 2008. 56 с.
13. Стюарт Томас А. Интеллектуальный капитал. Новый источник богатства организаций / пер. с англ. В. Ноздриной. Москва : Поколение, 2007. 366 с.
14. Тугускина Г. Н. Анализ человеческого капитала коммерческих предприятий. *Управление персоналом*. 2009. №1 (203). С. 42–44.
15. Управление человеческими ресурсами / под ред. М. Пула, М. Уорнера. Санкт-Петербург : Питер, 2002. 1200 с.
16. Формирование общества, основанного на знаниях. Новые задачи высшей школы / пер. с англ. Москва : Издательство Весь Мир, 2003. 232 с.
17. Ханнанова Т. Р. Деловая репутация и оценка человеческого капитала. *Менеджмент в России и за рубежом*. 2009. № 4. С. 108–111.
18. Шванцара Й. Диагностика психического развития. Прага : Авиценум, 1978. 388 с.
19. Эрфурт К. А. Особенности инвестирования в человеческий капитал и их отражение в кадровой политике предприятия. *Менеджмент в России и за рубежом*. 2009. № 3. С. 132–138.
20. Экономика труда: социально-трудовые отношения : учебник / под ред. Н. А. Волгина, Ю. Г. Одегова. Москва : Экзамен, 2006. 736 с.
21. A. De la Fuente, Ciccone, A. Le capital humain dans une economie mondiale sur la connaissance. *Rapport pour la Commission Europeenne*, Brussels. 2002. 119 p.
22. Amadeo K. Human Capital and How It Shapes America's Future. *The Balance*, August 12, 2019. URL: <https://www.thebalance.com/human-capital-definition-examples-impact-4173516> (accessed 09.09.21)
23. Becker G. Human capital. URL: https://www.academia.edu/35396287/HUMAN_CAPITAL_A_Theoretical_and_Empirical_Analysis_with_Special_Reference_to_Education_THIRD_EDITION (accessed 09.09.21).
24. Dobrinin A. I., Dyatlov S. A., Tsirenova E. D. Human capital in transitive economy: formation, evaluation, effectiveness of its utilization. Sankt-Peterburg : Nauka, 1999. 309 p.
25. Dolan E., Lindsay D. Market: microeconomic model. St.-Petersburg, 1992. 477 p.
26. Эрфурт К. А. Особенности инвестирования в человеческий капитал и их отражение в кадровой политике предприятия. *Менеджмент в России и за рубежом*. 2009. № 3. С. 132–138.
27. Фитц-енц Як. Измерение экономической ценности персонала / пер. с англ. Меньшикова М. С, Леонова Ю. П. ; под общ. ред. В. И. Ярных. Москва : Вершина, 2006. 320 с.
28. Floud R., Fogel R., Harris B., Hong C.H. The Changing Body: Health, Nutrition, and Human Development in the Western World since 1700. Cambridge : Cambridge University Press, 2011. 431 p.
29. Frank R., Bernanke B. Principles of Microeconomics (3rd ed.). New York : McGraw-Hill/Irwin, 2007. 464 p.
30. Garavan T., Thomas N., Morley M., Gunnigle P. Human Capital Accumulation: The Role of Human Resource Development. *Journal of European Industrial Training*. 2001. Vol. 25 (2). Pp. 48–68.
31. Goldin C. Human Capital. In: Handbook of Cliometrics. Heidelberg, Germany: Springer Verlag, 2016. P. 55–86, 56–57.
32. Human Development Report 2019. *United Nations Development Programme*, New York, 2019. 352 p.
33. Kiker B. F. The Historical Roots of the Concept of Human Capital. *Journal of Political Economy*. Vol. 74. № 5 (Oct., 1966). P. 481–499.
34. Kraay Aart. Methodology for a World Bank Human Capital Index. Policy Research Working Paper 8593, World Bank, Washington, DC; World Bank. 2018.
35. Lucas R. On the Mechanics of Economic Development. *Journal of Monetary Economics*. 1988. P. 3–42.
36. Mincer J. Investment in Human Capital and Personal Income Distribution. *Journal of Political Economy*. 1958. Vol. 66. P. 281–302.
37. Mokyr J. Gifts of Athena: Historical Origins of the Knowledge Economy. Princeton, NJ : Princeton University Press, 2004. 376 p.

38. Pettinger T. Human Capital definition and importance / Economics Help.org, 22 September 2019. URL: <https://www.economicshelp.org/blog/26076/economics/human-capital-definition-and-importance/> (accessed 04.05.20).
39. Rastogi P. Knowledge Management and Intellectual Capital as a Paradigm of Value Creation. *Human Systems Management*. 2002. Vol. 21 (4). P. 229–240.
40. Rodriguez P., Loomis R. New View of Institutions, Human Capital, and Market Standardization. *Education, Knowledge & Economy*. 2007. Vol. 1 (1). P. 93–105.
41. Romer P. Endogenous Technological Change. *Journal of Political Economy*. 1990. Vol. 98(5). P. 71–102.
42. Schultz Theodore W. Investment in Human Capital. *The American Economic Review*, Vol. 51, № 1 (Mar., 1961). P. 1–17. URL: <http://la.utexas.edu/users/hcleaver/330T/350kPEESchultzInvestmentHumanCapital.pdf> (accessed 09.09.21).
43. Solow R. Technical Change and the Aggregate Production Function. *Review of Economics and Statistics*. 1957. Vol. 39. Pp. 312-320.
44. Thurow L. Investment in Human Capital. Belmont. 1970. 104 p.
45. World Development Report 2018: Learning to Realize Education’s Promise. Washington, DC: World Bank.
46. Yarova M. Ukraine entered the top 50 countries of the world on the human capital index according to the World Bank / 25 October 2018. URL: <https://ain.ua/en/2018/10/25/top-50-countries-of-the-world-on-the-human-capital-index/> (accessed 09.09.21)

REFERENCES

1. A.De la Fuente & Ciccone, A. (2002). The capitl humain in an e`conomie mondiale sur la connaissance. Report for the European Commission, Brussels.
2. Amadeo, K. (2019, August 12) Human Capital and How It Shapes America’s Future. Retrieved from <https://www.thebalance.com/human-capital-definition-examples-impact-4173516>
3. Becker, G. (1964) Human capital. Retrieved from https://www.academia.edu/35396287/HUMAN_CAPITAL_A_Theoretical_and_Empirical_Analysis_with_Special_Reference_to_Education_THIRD_EDITION.
4. Dobrinin A.I., Dyatlov S.A. & Tsirenova E.D. (1999) Human capital in transitive economy: formation, evaluation, effectiveness of its utilization. St.Pet.: Nauka.
5. Dolan, E. & Lindsay, D. (1992) Market: microeconomic model. St. Petersburg.
6. Doroshenko Y. A. & Lebedev O. B. (2007) Human capital as a priority object of investment, *Creative economy*, 5, 11–18.
7. Economics of labor: socio-labor relations (2006): textbook. / by H. A. Volgina, Yu. G. Odegova, Moscow: Exam.
8. Erfurt, K. A. (2009) Features of investing in human capital and their reflection in the personnel policy of the enterprise. *Management in Russia and abroad*, 3, 132–138.
9. Fitzenz Jack (2006). Measuring economic value of personnel, translation from English: [M. S. Menshikova, Yu. P. Leonova]; ed by V. I. Yarnih, Moscow: Vershina.
10. Floud, R., Fogel, R., Harris, B. & Hong, C.H. (2011) The Changing Body: Health, Nutrition, and Human Development in the Western World since 1700. Cambridge: Cambridge University Press.
11. Formation of society based on knowledge. New tasks of higher schools, translation from English (2003). Moscow: Ves Mir Publishing House.
12. Frank, R. & Bernanke, B. (2007) Principles of Microeconomics (3rd ed.), New York: McGraw-Hill/ Irwin.
13. Garavan, T., Thomas, N., Morley, M. & Gunnigle, P. (2001) Human Capital Accumulation: The Role of Human Resource Development. *Journal of European Industrial Training*, 25 (2), 48–68.
14. Goldin, C. (2016) Human Capital. In: Handbook of Cliometrics. Heidelberg, Germany: Springer Verlag (pp. 55 - 86., pp. 56-57).
15. Hannanova, T. R. (2009) Business reputation and assessment of human capital. *Management in Russia and abroad*, 4, 108-111.
16. Health 2020: Fundamentals of European Policy and Strategy for the XXI Century. Retrieved from http://www.euro.who.int/__data/assets/pdf_file/0017/215432/Health2020-Long-Rus.pdf.
17. Human Development Report 2019 (2019). United Nations Development Program, New York.
18. Introduction to Psychology (1996). Moscow: Academy.
19. Kiker, B. F. (1966) The Historical Roots of the Concept of Human Capital. *Journal of Political Economy*, 74 (5), 481–499.
20. Klimonova, A. N. (2016) Population well-being as a general benchmark of state activity: essence, elements, factors of well-being. *Socio-economic phenomena and processes*, 11(12), 60–67.
21. Korchagin, Y. A. (2004) Human capital and development processes at macro and micro levels. Voronezh: CIRE.
22. Kraay, Aart (2018) “Methodology for a World Bank Human Capital Index”, Policy Research Working Paper 8593, World Bank, Washington, DC; World Bank, 2018.
23. Krutezky, V. A. (1972) Fundamentals of pedagogical psychology. Moscow: Prosveshenie.
24. Lesnikov, I. N. (2009) Investing into a system of balanced indicators of personnel evaluations. *Personnel management*, 6 (206), 47–50.

25. Lucas, R. (1988) On Mechanics of Economic Development. *Journal of Monetary Economics*, 3–42.
26. Maklakova, E. A. (2010) Human capital: concept, assessment, accounting. *Bulletin of LSU n.a. A.S. Pushkin*, 1, 56–69.
27. Management of human resources (2002) /by M. Pula, M. Warner, St. Petersburg: Peter.
28. Mincer, J. (1958) Investment in Human Capital and Personal Income Distribution. *Journal of Political Economy*, 66, 281–302.
29. Mokyr, J. (2004) *Gifts of Athena: Historical Origins of the Knowledge Economy*, Princeton, NJ: Princeton University Press.
30. Pedagogical dictionary (2005): For students of higher and secondary education / by G. M. Kodzhaspirov, A. Yu. Kodzhaspirov. 2nd ed., Ster. Moscow: Academy.
31. Pedagogy (2005): The Great Modern Encyclopedia / by E. S. Rapatsevitch, Minsk: Sovremennoe Slovo.
32. Pettinger, T. (2019, 22 September) Human Capital definition and importance /Economics Help.org. Retrieved from <https://www.economicshelp.org/blog/26076/economics/human-capital-definition-and-importance/>
33. Rastogi, P. (2002) Knowledge Management and Intellectual Capital as a Paradigm of Value Creation. *Human Systems Management*, 21 (4), 229–240.
34. Rodriguez, P. & Loomis, R. (2007) New View of Institutions, Human Capital, and Market Standardization. *Education, Knowledge & Economy*, 1 (1), 93–105.
35. Romer, P. (1990) Endogenous Technological Change. *Journal of Political Economy*, 98(5), 71–102.
36. Roshchina, Ya. M. (2008) Psychological components of human capital as a factor in economic behavior. Preprint WP15 / 2008/03, Moscow: GU VSHE.
37. Schultz, Theodore W. (1961, Mar.) Investment in Human Capital. *The American Economic Review*, 51 (1) 1–17. Retrieved from <http://la.utexas.edu/users/hcleaver/330T/350kPEESchultzInvestmentHumanCapital.pdf>.
38. Short pedagogical dictionary (2007). Moscow: V. Sekachev.
39. Shwanzara J. (1978) Diagnosis of mental development, Prague: Avicenna.
40. Solow, R. (1957) Technical Change and the Aggregate Production Function. *Review of Economics and Statistics*, 39, 312–320.
41. Stewart A. Thomas (2007). Intellectual capital. A new source of wealth for organizations/ translation from English, B. Nozdrinoy, Moscow: Generation.
42. Thurow, L. (1970) Investment in Human Capital, Belmont.
43. Tuguskina, G.H. (2009) Analysis of human capital of commercial enterprises. *Personnel management*, 1 (203), 42–44.
44. World Development Report 2018 (2018): Learning to Realize Education’s Promise, Washington, DC: World Bank.
45. Yarova, M. (2018) Ukraine entered the top 50 countries of the world on the human capital index according to the World Bank/25 October 2018. Retrieved from <https://ain.ua/en/2018/10/25/top-50-countries-of-the-world-on-the-human-capital-index/>

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КАПІТАЛ ЛЮДИНИ ТА ПОТЕНЦІАЛ ЛЮДИНИ: ПИТАННЯ ВЗАЄМОДІЇ ЗА УМОВ СУЧАСНОГО РОЗВИТКУ СУСПІЛЬСТВА

У статті висвітлено проблему вивчення взаємозв’язку економічних і освітніх систем. Зроблено акцент на особливостях цього взаємозв’язку в епоху трансформаційних процесів у суспільстві, підґрунтям існування якого є знання людини і вміння застосовувати їх у практичних сферах діяльності. Вказано на те, що знання є складовою частиною понять «капітал людини» та «потенціал людини».

Мета статті полягала у з’ясуванні співвідношення взаємодії між поняттями «капітал людини» та «потенціал людини».

Для її реалізації були поставлені такі завдання: висвітлити зміст і наповнюваність терміну «потенціал людини»; виокремити складники накопиченого людського потенціалу; зробити акцент на знаннєвій складовій частині

як однієї з основних компонент педагогічної теорії в актуалізації питань взаємодії «капіталу людини» і «потенціалу людини» за умов сучасного розвитку суспільства.

У дослідженні були використані такі методи: збору й аналізу літературних джерел у контексті обраної теми; метод узагальнення даних; метод систематизації; метод синтезу теоретичних положень.

Було зроблено висновки про те, що: накопичений людиною потенціал, складниками якого є природний людський потенціал і людський капітал, визначаються сукупністю взаємодії внутрішніх і зовнішніх факторів (вроджених схильностей, придбаних у процесі розвитку й йдосконалення особистісних, а також професійних рис і якостей та інвестицій у людину і в підприємство); знання самі по собі є капіталом за умов, що їх вкладання у конкретне виробництво або сферу зможе принести економічну вигоду для їх носія і забезпечити ефективність роботи підприємства загалом.

Перспективи подальших досліджень полягають у вивченні умов, які створюють заклади освіти для подальшої акумуляції студентами потенціалу людини.

Ключові слова: знаннява компонента, економіка знань, розвиток, професійних якостей, працівник.