

M.Ye. Nurgaliyeva, E.S. Ganiyeva
(Pavlodar)

INTELLECTUAL POTENTIAL OF MODERN MAN: STRUCTURE AND WAYS OF FORMATION

Summary. The article considers the intellectual potential as a complex category of social humanitarian knowledge. The author determines the peculiarities and basic components of the intellectual potential of a person in an information-oriented society. With the accelerating pace of life, the role of communication and requirements for the communication skills of the individual. Special attention is paid to cognitive and value-motivational components.

Keywords: intellectual potential, «current modernity», man in an information society, cognitive mobility, verbal intellect, culture of thinking, values, self-education.

Аннотация. В статье рассматриваются вопросы, связанные с интеллектуальным потенциалом как категории комплекса социально-гуманитарных знаний. Выявляются особенности и составляющие интеллектуального потенциала человека информационного общества. С ускорением темпов жизни возрастает роль коммуникации и требования к коммуникативным навыкам личности. Особое внимание уделяется когнитивной и ценностно-мотивационной составляющим.

Ключевые слова: интеллектуальный потенциал, «текущая современность», человек информационного общества, когнитивная мобильность, вербальный интеллект, культура мышления, ценности, самообразование.

In the conditions of the active modernization of the Kazakhstani economy and the formation of an education system that can meet the need of the economy in a new quality worker, it becomes urgent to convert social knowledge to the analysis of content in such categories as «human capital» and «intellectual potential».

The notion of «human capital» is mainly used as an economic category associated with the evaluation of the embodied in the individual ability to generate income, both to the employee himself/herself and the employer. Most often human capital includes human inborn abilities and talents, obtained in the process of education, knowledge and formed competencies, qualifications acquired in a certain profession. The peculiarity of human capital in the conditions of post-industrial civilization is a sharp increase in the intellectual component, which makes it possible to produce new ideas, technologies and other innovations, which draws the attention of researchers to the notion of «intellectual potential».

At the present stage of the scientific knowledge development, the concept of «intellectual potential» is widely used by a complex of social and humanitarian knowledge. Economics conducts analysis of intellectual potential of an employee, company, society, and country. According to V.A. Lavrentyev and A.V. Sharina, «intellectual potential is a totality of theoretical knowledge, practical experience and individual abilities of an employee who carry

out works to create innovations in industrial enterprises and organizations» [1, p. 84]. There are absolute and real intellectual potential. Absolute intellectual potential is determined by the level of complexity of the problems faced by the enterprise and requiring solutions. Real intellectual potential manifests itself in the actual conditions when executing labor operations, in the actual level of knowledge, competencies, and individual abilities of employees at the enterprise. Moreover, economists pay attention to quantitative and qualitative indicators of intellectual potential development. Quantitative measurement is associated with the growth rate of a knowledge-intensive enterprise, and qualitative measurement characterizes the increase in the personal qualifications of each employee when implementing innovations.

Most often determined components of an employee's intellectual potential are the following:

- a cognitive component, including theoretical knowledge, practical experience, professional competence;
- a creative component, including the ability to carry out work to create innovation, solve complex problems;
- a personal component, which includes personality traits, psychophysical and professional personal qualities.

When defining the level of complexity in the solution of tasks and basic requirements to personal qualification abilities, the economy makes its requirements to the education system, which, fulfilling its social functions, shall meet the needs of the developing system of social production in qualified personnel.

The process and ways of formation of modern man's intellectual potential are widely discussed by psychologists, philosophers and teachers, linking it with the need to modernize the education system as a whole, both the content of the educational process and the technologies of knowledge transfer. The project of education of the future is one of the urgent problems of the philosophy of education. Such a project certainly includes answers to the following questions: «What kind of person is needed for a future society?», «What shall be taught?», «How and in what forms will the learning process take place?» The answer to the above questions involves an analysis of the characteristics of modern society and the identification of those requirements for the person and his/her intellectual potential, which it puts forward. In our opinion, a philosophical analysis of the realities in contemporary social life and its demands on the individual will make it possible to clarify and specify the content of the «intellectual potential» category, to focus on some of its components.

The consequence of the development of information technology is the change in the space-time relations of society. The characteristics of the new social chronotope are densified due to the existence of the Internet and a sharp acceleration of time, which allowed Z. Bauman to identify the society of the 21st century a «fluid modernity». Let's try to draw an image of a person, corresponding to the realities of «fluid modernity».

As A. Toffler notes, knowledge workers and intellectuals are the producing class of the information society, and intellectual work on obtaining and using knowledge in applied types of activity will become its leading form. A person will have a bright individuality, for the possibility of choosing one's own path of life sharply increases. «In the new circumstances, most of the human lives will be spent in the tormenting selection of goals, and not in finding means that do not require consideration» [2, p. 69]. It is no coincidence that one of the urgent problems of modern philosophy is the problem of identity search. The possibility of self-creation, the choice

of a value system, mobility and the ability to develop are the features that shape the image of a modern man. Z. Bauman writes, «Modernity replaces the heterogeneous definition of social position with mandatory self-determination». The meaning of the above reasoning is obvious: if a person wants to assert himself/herself in the modern world, unstable and constantly changing, consisting of situations of risk and uncertainty, the only way is to accept the conditions of this world and learn to change, to adopt mobility as one of the criteria of modern competence.

The category of «mobility» is actively used by sociological knowledge. Social mobility is traditionally understood as a change of a person's position in society. Mobility's becoming as one of the criteria of modern competence raises interest in this category and other representatives of scientific knowledge, which led to the study of various types of mobility (we list only those that are close to analyzing our subject of research) – professional, cognitive, sponsored, and competitive. The assimilation of accumulated by society knowledge, images and values of national culture, norms and traditions no longer satisfy the requirements of the present day. There is a problem arises which is in the formation of new competencies as abilities to apply knowledge, skills and personal qualities for successful activity in a certain field. And the leading position among professional, social, communicative competencies will be taken by the competence of mobility, the ability to change, and adapt to «fluid modernity».

According to the researchers, person's need to implement such an opportunity will appear regularly through time intervals of 5–7 years, similar to the life term of goods or relevant brands. T.L. Tulchinskiy shows that the use of marketing technologies to create their own relevance, demand for themselves will be characteristic not only in the labor market, but also in social life, personal relationships, in everyday life. Constant positioning of oneself as a condition for the subsequent self-realization presupposes the constant input of information about oneself into the social, economic, political and cultural space [3, p. 54].

A. Karpov, justifying the need to create a concept of cognitive mobility, considers it as an opportunity due to the possession of knowledge and skills of their practical use, intellectual and creative abilities to maintain or enhance their social status. Undoubtedly, cognitive mobility is connected with the professional one and, in our opinion, enters into the cognitive subsystem of the intellectual potential of modern man.

Information technologies create significant opportunities for establishing personal and professional contacts, which every member of society must be able to use. A. Toffler points out that a person of the information society will need skills and skills in three key areas: the ability to learn, the ability to communicate and the ability to choose [4, p. 450].

In the conditions of a sharp increase in the flow of information, knowledge becomes a «perishable product», and globalization is inseparably linked with the phenomenon of «structural unemployment». Knowledge and technology become obsolete, whole professions, which were needed 10 years ago, become non-demanded. Society spends a lot of money on vocational training, but how effective is it organized? It has long been known that it is not the amount of knowledge that works effectively, but the system. The system of knowledge is not reduced to its separate elements (knowledge of concrete facts), but consists of the ability to operate with connections and relations. Whatever specific facts the theory is based on, it is the theory with the principles of the interpretation of facts that makes it possible to present reality as a regular and definitely organized one.

A strategy that allows a person to master the principles of the knowledge arrangement and systematization, the ability to classify and systematize information even when the prin-

ciples of systematization change makes it easy to master new knowledge. The requirements to person's culture of thinking sharply increase. «A culture of thinking or logical culture is a system of thinking skills that allows expressing existing thoughts in a clear and distinct form and gaining new thoughts on the basis of a logical form». The core of the ability to learn is the culture of thinking and the verbal intelligence formed on its basis.

Verbal intellect is the sum of the following competencies: 1) the ability to identify analogies, establish links between different types of verbal information; 2) flexibility and speed of thinking; 3) the ability to objectively make assumptions, evidence of hypotheses; 4) the ability to think logically, consistently, unequivocally and reasonably; 5) the ability to analyze and predict; 6) the ability to develop complex activity algorithms.

Ability to learn, unlearn and retrain [4, p. 450], the methodological culture of a man and its cognitive mobility – this is the basis for the future formation. Illiterate in the future will not be the person who does not know how to read, but the one who does not know how to learn.

And another element of the cognitive component of the modern man's intellectual potential, connected with the realities of the information society, is information culture, [5, p. 406–409] a phenomenon that has been thoroughly studied in modern scientific literature.

With the acceleration of the life pace, the role of communication and the demand for communication skills of the individual is growing. People are programmed to be together, and society is a system of human interactions, communications. Stability of the social life of past contributed to the ritualization of communication forms, the formation of traditional forms of man relations. In these conditions, morality played a significant role. At present, man relations acquire a fragmentary character, and individual autonomy becomes higher than moral obligations and even in the closest, most intimate relationships people do not want to take responsibility for another. In addition, virtual reality makes it possible to meet the need for communication in a simpler and more accessible way. Hiding under the mask of «nickname», it is easier to adjust to the interlocutor, you can hide your essence and easily break off relations that have lost relevance. The «easy» attitude to life makes its value dimension especially urgent, as the dependence of man interactions on the moral and legal maturity of a person is sharply increasing.

In the conditions of professional activity, when the changes introduced by human activity into the environment are global, and a man becomes the main participant in ongoing events, the role of axiological, value factors in the use of knowledge sharply increases. How will new knowledge and technology be used – «for good or evil,» what are the consequences of using them for nature and society? Is science and production activity of a person neutral, free of values? Value acts as the quality of the relationship of the activity subject to its result and contributes to the strengthening of the motivation of the actions and actions of the person, is associated with the deep experiences of their activities.

Analyzing the main components of the intellectual potential of modern man, such authors as A.I. Subegto, O.V. Shilov emphasize the need to identify the motivational, value part of it. And the point here is not only in the traditional addiction of philosophy to the value problem. Often the realities of modern life give rise to the need to learn the art of forming one's own image, the ability to self-presentation in order to emphasize the profitable aspects of one's personality, to dress it in beautiful packaging and give such qualities as «perseverance», «assertiveness», «reliability», «vanity», «working capacity». It is no accident that business coaches constantly talk about having «useful» and «useless» spirituality. «Useful»

spirituality is represented as «man capital», and «man capital» is interpreted solely as a level of education, work experience, professional competence, bringing the owner maximum profit. Spirituality as the wealth and integrity of the inner world, human qualities, the emotional and moral component of the personality falls into the «useless spirituality» that prevents a person from constantly changing, proceeding from the principle: «I am what you want to buy me» [6, p. 227]. It is hardly possible to agree with this position.

In the Message to the people of Kazakhstan «Strategy of Kazakhstan-2050»: the new political course of the state, the President of the Republic of Kazakhstan Nursultan Nazarbayev defined education as one of the fundamental priorities of state development. The head of state stressed that the main direction of the modern education system is advanced knowledge and professional skills [7, p. 15]. Most importantly, there is a need for a person in the labor market with an emphasis on creativity, initiative, professional mobility, information culture, the depth of theoretical knowledge of the components of intellectual potential. It is assumed that every 10–15 years, a successfully positioning specialist will have to change his profession and, therefore, retrain, so much attention is paid to independent access to education resources and self-education technologies. All this, of course, meets the requirements of the times. But without attention there is a question of formation of the value world of the person defining limits of a measure of possible action freedom, acting as a basis of sociality and criteria of maturity of the person. The following fact is stated: the school overloads children with knowledge, the demand of which is questionable. At the same time, the school does not teach useful skills (including social competencies, search and assessment of information) and has little effect on the formation of values. Formation of the world value of a man is completely shifted to the school education system, thus the release of professional education from the education of the social responsibility of future specialists is supposed. The program does not raise questions and does not discuss the formation of professional ethics. Moreover, the formation of a value-based world is viewed alongside general educational competences – mathematics and a foreign language, which constitute only the basis of special vocational education.

Thus, the components of the intellectual potential of modern man can be represented as follows:

- cognitive component, including theoretical knowledge, practical experience, culture of thinking and developed verbal intelligence, information culture, cognitive and professional mobility, professional competencies;
- a creative component, including the ability to carry out work to create innovation, solve complex problems;
- a personal component, which includes personality traits, psychophysical and professional personal qualities;
- the motivation and value component, which includes the system of norms of cognitive activity, morality and law, professional ethics.

The question of ways of forming intellectual potential is also topical. Analyzing the components of the intellectual potential of the national economy, in its composition as mandatory elements include the system of vocational education, higher education, postgraduate and additional education. Selected elements are most often considered as the main ways of forming intellectual potential in the conditions of modern society. In our view, self-education occupies a special place in the conditions of continuous education,

which forms the intellectual potential of modern man. Today, continuing education is still perceived as the idea of a superstructure, additional training in those cases where the basic is not enough.

Self-education becomes an indispensable component of continuing education of the individual, a condition for career growth, and, ultimately, a condition for the progressive development of society. It is no accident that this phenomenon is increasingly beginning to attract the attention of the scientific and pedagogical community, which was reflected in the works of A.E. Avdyukova [8], V.V. Bayluk [8], I.A. Larionova [10] and other researchers.

Self-education is an education obtained independently, outside the walls of an education institution, without the help of a tutor. It can be represented as an activity of the doctrine, independently organized by the subject, satisfying the need for cognition and personal growth.

If in the XX century, self-education was seen as a way of realizing personal interest in the sphere of knowledge for practical use or cognitive interest (a kind of hobby), then the realities of the 21st century transform it into a socially necessary type of education activity, the condition for acquiring «cognitive mobility» as the basis for professional self-actualization in conditions of «fluid modernity». All this urgently requires an analysis of self-education as a special kind of social activity arising from the needs of modern life.

As a special kind of activity and social action, self-education consists of a goal, a subject, an object, needs and motives, means and result. The goal of self-education activities, ultimately, is to self-development and self-improvement of one's own personality, the realization of one's own life project. The subject of self-education activity can only be a socially mature person, capable of independent thinking, self-organization and self-control. The object of self-education is the self-knowing subject. The coincidence of the subject and the object is a feature of this type of activity. By transforming and perfecting our own spiritual world and professional competencies, a man capable of self-education realizes the need for personal growth and self-realization.

The problem of motivation of this type of activity requires special attention. The motive can be regarded as a motivation for action arising from the realization of a need, while the needs, as an element of motivation, are generated by the contact of the subject with the environment of its existence. Among the means of self-education, first of all, modern sources of information are mentioned. Obviously, in the system of continuous education the key factor of effectiveness is the independent work of students, and, consequently, their independent access to education resources and technologies of self-education. For this, access to education resources will be provided at all levels of the education system, primarily in the form of public libraries, digital education resources based on domestic development and the localization of the best education resources from around the world.

Finally, the most important element of the activity structure is the result. Such a result of self-education activities should be a mobile specialist, in demand by a modern economy, which differs substantially from the modern product of education activity.

Thus, the formation of the intellectual potential of modern man has a complex structure, a number of features and a variety of formation ways. Not only education as a social subsystem should survive reform in accordance with the requirements of modern high technology production, requirements to the human factor of production, its mobility, creativity and independence are significantly increased.

References

1. Lavrentyev, V. A., Sharina, A. V. Intellectual potential of the enterprise: concept, structure and directions of its development // Journal of Creative Economy. – 2009. – № 2(26). – P. 83–89. URL: <http://www.creativeeconomy.ru/articles/2173/>
2. Bauman, Z. Flowing modernity. St. Petersburg. : Peter, 2008.
3. Tulchinsky, G. L. Personality as a car project and brand: some consequences // Philosophical sciences. – 2009. – № 9. – P. 47–60.
4. Toffler, E. Shock of the future. – M. : Ast., 2008.
5. Nurmeeva, N. R. Formation of the information culture as a reflection of the modern requirements of the information society // Information technology and society (Educational Technology & Society). – 2005. – V. 11. – № 4. – P. 406–409.
6. Fromm, E. «To have» or «to be»? M. : AST: Astrel: Poligrafizdat, 2012.
7. President's message of the Republic of Kazakhstan – Leader of the Nation Nursultan Nazarbayev to the people of Kazakhstan «Strategy» Kazakhstan-2050 «: a new political course of the state». – 2012.
8. Avdyukova, A. E. Features of motivation for students' self-education of the «Advertising» and «Public Relations» specialties in the process of education activity at the university. // Pedagogical education in Russia. – 2013. – № 2. – P. 45–48.
9. Bayluk, V. V. Humanity. Self-educational and self-educating realization of personality as the laws of success: monograph The / Oral state pedagogical university. – Ekaterinburg. 2012.
10. Larionova, I. A. Self-education and self-improvement as a means of forming the subjectivity of a specialist // Pedagogical education in Russia. – 2013. – № 2. – P. 14–17.