

## ABSTRACT

The article considers the influence of education on human capital development, as well as the effects of creative capacity for development of entrepreneurship and economic activity. Some modern trends in education are also considered in relationship with their impact on development of creativeness of future employees. Thus, while showing a tendency to replace the text presentation

of training course and of research results with slide presentation of teaching materials, the author notes a risk that such a disaccustoming from the perception of textual information can have negative consequences for intellectual development of individuals as well as for economic growth. At the same time the high value of contests of creative works of students and Ph.D. students, held in the field of railway transport, is underlined.

**Keywords:** human capital, economic growth, rail transport, entrepreneurship, education.

**Background.** Growth of the level of education, professional skills development increases the value of human capital, which is an essential component of the wealth of modern society and a key driver of economic growth [1].

In rail transport, according to the most conservative estimates, the cost of human capital is several times higher than the material one. Its increase has become an urgent task of economic management in the railway sector [2, 3]. But the main feature of the human capital is not a high cost, but a fact that its carriers are individuals, each of whom has not only specific professional skills, but also specific goals and values, psychological patterns and behavioral patterns<sup>1</sup>.

All these aspects significantly affect the value of human capital, the efficiency of the use of various resources within social reproduction, and so have important impact on the dynamics of economic growth.

**Objective.** The objective of the author is to consider the influence of modern education and new forms of information presentation in teaching process on the economic growth.

**Methods.** The author uses general scientific methods, comparison, scientific description, economic analysis.

**Results.** The current «turbulence» of the world economy, a serious slowdown in economic growth in the «old» economic centers (mostly – in Western Europe and Japan), a sharp deceleration of dynamics of Chinese economy, long-term disruption of the dynamics of the Russian economy make the problem of economic growth a key one for each country and each industry. All is very closely interconnected in the modern world. In recent studies the various causes of instability and slowing of economic growth were analyzed and a set of recommendations for its acceleration was given. The role of the transport factor in ensuring the long-term global economic growth was highlighted [5, 6].

Among the various interpretations of the causes of the global economic deceleration we should pay attention to the position of E. Kolombatto. He identifies rightly as key factors for economic growth technological progress and entrepreneurship [4, p. 266], while noting that the driving force of technological progress are the efforts of entrepreneurs [4, p. 245]. It should be recalled that entrepreneurship is a special economic function associated with discovery and implementation of new, lucrative opportunities [7, 8]. This function can be carried out not only by businessmen, but also by hired managers and other employees, representatives of different professions, each person within their household (this subject in detail was regarded by J. A. Schumpeter [9, pp. 142–143]). Therefore, the level of business activity depends not on a relatively narrow range of capital owners and organizers of production, but in varying degrees on most members of society, and hence of the dominant ideas in society, the prevalence of certain psychological patterns and behavioral patterns.

E. Kolombatto sees as a key reason for the economic slowdown a long-term drift from productive to unproductive businesses, expressed in the pursuit of bureaucratic rent [4, p. 274] and the gradual weakening of a propensity to productive entrepreneurship. He calls this trend «entrepreneurial stupor» [4, p. 277].

Analyzing the causes of the «stupor» Kolombatto focuses on the role of education.

Firstly, in his opinion, the dominance of public education reduces the quality of teaching and does not produce the personal responsibility of students [4, p. 277–278].

Secondly, individuals do not form behavioral responses (attitude towards risk, decision making under uncertainty), needed to adapt to the economic crisis and, accordingly, for a speedy overcoming of crises. The «market signals get misreading due to the fact that individuals ... have learned (in an educational institution or in the workplace) not to read» [4, p. 289–290].

The last argument deserves to be considered in more detail. Both in training, and even in the scientific materials text materials are increasingly replaced by the presentation, slides. It is considered as a modern trend, and text form is considered as a kind of archaic, needing maximum visual processing into «pictures». Often, on slides the words themselves are replaced with any symbols. All this is reminiscent of a return, with the help of modern computer programs, to a pre-alphabetic era of pictographic writing. Of course, development is a spiral, but this example of dialectical «negation of negation» cannot be considered as a progress. After all, language is not only a communication tool, but also an instrument of thought. A person comprehends reality and argues with the help of words. The images, symbols cause primarily an emotional response, and only their subsequent interpretation, thinking generates in the minds the verbal construction. The task of a slide – a fellow of billboards and propaganda posters – is not to awaken independent thinking, but to bring, to sow in mind, preferably without critical reflection, simple thesis, supported by emotional perception.

A person perceives and evaluates the environmental reality, if we use the conceptual apparatus of Nobel laureate D. Kahneman, with two modes or systems of thought: «System 1» and «System 2» [10].

«System 1» comes into action automatically and very quickly. It is impulsive and intuitive, creates impressions and feelings. Among its characteristics described by D. Kahneman [10, p. 141–142] are: neglect of ambiguity and suppression of doubt; predisposition to believe and to confirm; overestimation of small probabilities; perception of the world on the principle of «what you see, then that there are» ignoring the circumstances that do not lie «on the surface». (Last is common in the evaluation of economic phenomena error discussed in detail even in the middle of the XIX century by the outstanding French thinker F. Bastiat in his paper «What is seen and what is not seen» [11, pp. 803–838], but has not become since less frequent). It is «System 1», which is «responsible» for the so-called «irrational» or «limited rational» behavior of individuals, based on emotional reactions and hasty conclusions without critical reflection of the situation.

«System 2» monitors and controls the thoughts and actions proposed by «System 1», «is actively engaged in intentional search for information in memory, complex calculations, comparisons, planning and choice» [10, p. 139]. It «is capable of reasoning and careful, but in some people it is also lazy» [10, p. 67]. Therefore, the less «System 2» will be included in the perception of reality, the less rational will be human behavior.

«System 2» formulates opinions and makes choices, but often approves or justifies the ideas and feelings that have arisen in «System 1» [10, p. 543]. The more adapted is information for perception of «System 1» and the greater impact has it on «System 1», the more likely is it that «System 2» will remain passive and «approve» the results of impulsive and impressionable «System 1».

Images, brief abstracts are addressed primarily to «System 1», complex texts – to «System 2». Transformation of texts into slides (with inevitable drastic simplification of their

<sup>1</sup> Psychological pattern – a way of conscious perception of reality by an individual, reflecting his preferences and inclinations. Behavioral pattern – a routine practice of individual behavior in real conditions of severe restrictions imposed upon him [4, p. 24, 420].

meaning) leads to the fact that the recipients of this information have minimized work of «System 2». There is a kind of «stupor» of consciousness, one consequence of which is «stupor» of business functions. As the proverb says: «simplicity is worse than stealing».

No wonder that the staff of consulting companies is so fond of the form of a slide presentation of their reports. With the help of slides it is much easier than using a text to convince customers that they are right. But why do customers have to share this love?

People getting in the biological and social evolution new skills, lose also a lot to. Knowing how to handle a computer and drive a car, we have lost the ability to make stone ax or make fire by friction.

At the same time, as evidenced by the research, the average volume of human brain has reached a maximum level during the Upper Paleolithic (40–25 thousand years ago), and then began to decline, and in the last 10 thousand years, this trend has become particularly noticeable. According to the eminent biologist A. V. Markov [12, pp. 253–255], the reason for this trend could be saturation of the culture medium with useful ways of behavior (memes), and accordingly increase in their borrowing capacity. So it was no longer necessary «to reach all your mind» and «for survival and successful reproduction, apparently, it is no longer needed such a high intelligence, as before» [12, p. 254]. Moreover, as the simulation shows, complex memes, the use of which is shown at longer intervals of time, tend to be replaced by more simple, which are learned easily, that could be the basis of the evolutionary simplification of intelligence. Of course, these explanations are hypothetical, but the analogy with the displacement of the complex textual information with simplistic «pictures» is obvious. It is also clear, however, that this simplification does not stimulate the development of intelligence, activity of rational, reasonable «System 2».

Therefore, disaccustoming from the perception of textual information can have very negative long-term consequences.

Of course, a schematic, slide image is useful as a supplement to the text – to show an empirical example, to demonstrate a tendency, to focus on the key points. But only a supplement. If the goal is not to «drive» in the minds some simple abstracts, but to show the complex relationship between economic processes, to reveal the ambiguity of certain theoretical positions and thereby to encourage a person to think and reason alone, it should be done with the help of the detailed text, instead of «rough tongue of a poster».

Schemes, slides can complement the text, as a secondary material, but in any case not replace it, not become the primary, which is sometimes practiced. In this case a report or a lecture «via presentation» transforms often into a set of comments to slides and cannot be adequately interpreted in isolation from them, because they do not possess fullness, connectivity and logical harmony.

The same can be said of the test of students' knowledge by means of tests. Tests are suitable again as an auxiliary tool to assess knowledge of the key provisions. But the ability to self-analysis, expanded argumentation, proof of own opinion can be detected only during the oral interview (better – debate, dialogue, no wonder this form was a key one in teaching and in antiquity and the Middle Ages) or by writing creative work, using again textual presentation.

In this regard contests of creative works of students and young scientists, carried out in the sphere of railway transport, such as the annual All-Russian contest of scientific works of students and graduate students on transport issues organized by the United Academic Council of JSC Russian Railways [13, 14], contest «Young scientists of the transport industry» under the auspices of the Ministry of transport of Russia [15] are important.

**Conclusion.** Education is a tool, by which the supporting structures of productive business, tolerance, trust and long-term cooperation can be built [4, p. 340]. It is crucial to ensure the dynamic growth of the economy. After all, the economy is not a complex of capital goods and technologies, transforming resources into finished products, in which it is sufficient to improve something or to add something in order it works more productively. Economy is a field of human activity, in which the result is determined by the way individuals respond to incentives. Therefore, the key importance is given to the ability of people to a correct understanding of the economic situation

and adequate adaptation to it, which depends on both the economic and the general education and thinking. Given the extent to which the mass consciousness is filled with pseudo economic mythology, the task of economic education should be considered as one of the key tasks to ensure long-term economic growth.

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