



Building Strategic Workforce Reserve and Other Tasks of Modern Education

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ABSTRACT

In the article terms workforce and workforce potential are analyzed in depth aiming to show different viewpoints on this issue. Detailed analysis allows authors to arrive at definition that "workforce potential" is a complex multilayer composition of individual skills specific for an individual worker, includes professional knowledge and cognitive capabilities and that development of this category is heavily dependent on motivation and expertise. Taking into consideration the speed with which changes are happening nowadays authors are pointing that intellectual skills are the only resource that allows to cope with the speed with which new knowledge is created nowadays. That's why one of the crucial ways to develop workforce potential is to advance its "intellectualization" - intellectual skills and modern education is supposed to solve this task. The main goals of society and state in creating strategic workforce potential consist in long-term educational goals and strategy setting the way that take in consideration the ever accelerating pace of technologic lifestyle, forecasts and foresights in economy, social life, basic sciences and technologies; uniform national approach to motivation; higher education and corresponding additional courses modification in terms of both form and content.

Keywords: Workforce, Intellectual Skills, Motivation, Workforce Potential

JEL Classifications: J21, J23, J24

1. INTRODUCTION

The term "workforce reserve" is mentioned in a large number of publications. Their authors usually define the subject of their research as the workforce potential of a single organization, rarely as that of an industry or a geographic region, while the object of the research are methods of analyzing and developing the workforce reserve of a separate company.

Several definitions of the term follow.

Workforce potential of a company - is the expertise of the staff of a company used on a regular basis throughout their labor activity, as well as those skills and knowledge that they do possess, but have not yet implemented at work or during professional training.

Many authors reasonably assume the word "potential" was derived from the Latin word "potential," meaning hidden possibilities, power and force. In terms of semantics, the term "potential" means "a source of possibilities, means or supply that can be activated and used to solve a certain task or reach a certain goal, capabilities of an individual, society or country in a certain domain."

The terms "potential" and "resources" should not be opposed. A potential (economic, military, labor, scientific, financial, spiritual, workforce) is a "generalized characteristic of resources bound to a place or time."

The term "workforce potential" represents the resource aspect of social and economic development. Workforce potential can be defined as aggregate capabilities of every person employed by a certain company (region, economy sector, society, state - remark by author) or solving a certain set of tasks.

Another author (Kravchenko, 2001) defines “workforce potential” as hidden, not yet used capabilities and skills, hidden reserves. There is also a term “strategic workforce potential” referring to training staff of a certain specialization and qualifications that will be ready to work effectively, solve forthcoming tasks and perform new functions in 10-15 years. Besides that, development of workforce potential involves raising a new generation of workers possessing new professional skills rather than reproducing quality and quantity of existing staff.

Thus, “workforce potential” (Here and further, “workforce potential” is defined in general - for a company, region, industry, society and state) is a complex multilayer composition of individual skills specific for an individual worker. It would be a fair generalization to say that both practical efficiency and development of workforce potential are based on the two main categories – expertise (Certain discrepancy between knowledge and competence is suggested to be a subject of further discussion) (knowledge, competence) and personal motivation.

2. MOTIVATION

Turning to the subject of motivation, it has two aspects - one of process, and the other of mechanism. The former is a process of emotional and sensitive comparison of what is desired with the actual object of demand. The latter is an internal human psychological mechanism that allows to identify the object corresponding to the demand and then activates the process of obtaining the object (providing it corresponds to the demand). Examples of these generalized “object” and “demand” can (and should) be strive for personal development, acquisition and implementation of new skills and knowledge. It is especially vital today as the basic set of knowledge and skills is estimated to completely change every 5-10 years.

Modern publications on motivation offer a transition from the classical motivational “Maslow’s hierarchy plus” (Figure 1) to the more generalized and modern “Maslow’s hierarchy plus” (Verholazenko et al., 1998).

In authors’ opinion “workforce potential” includes:

- a. Professional knowledge, skills and abilities, resulting in professional competence (qualification potential)

Figure 1: Maslow’s hierarchy+



- b. Cognitive capabilities (educational potential). The former corresponds to 5th layer of the Pyramid, the latter - to 6th and 7th.

The second aspect of the motivation problem requires studying chronological characteristics of both the process and mechanism. The most popular modern publications treat motivation as something that exists “here and now,” i.e., refers to a single organization and its current state. It is evident that this approach is insufficient when strategic workforce potential (that will be used in 10-15 years’ time) is to be analyzed.

Consequently, this brings up the need to address international experience. Research on strategic workforce potential started in the second half of the XXth century. The USA, Japan and several other countries adopted laws that stimulated both public and private companies to invest in “human potential.” The Japanese Government developed the concept of “human formation” as a ground for economic and social development. The concept was followed by the “Human development in a new industrial society” program that included educational and personal development principles required by informational society. Similar programs were developed in the USA, France, Great Britain, Sweden and several other countries. In developed countries, the policy of labor resources (and workforce potential as well - author’s remark) development is introduced by the Government and executed with major financial and organizational support of businesses and social institutions (Neverkevich, 2008). The old experience of workforce development in the USSR should not be discarded either. The personnel development system of that period that consisted of pre-school, school and higher education stages was destroyed, and a new one has to be built now, which is not a simple task in the environment of various forms of private property and three-layer authority system (Remenuk, 1999).

The structure of productive forces in modern post-industrial economy radically differs from that of 20, 40, not to say 100 years ago (Mundrievskaya, 2010). Main share of modern productive labor force consists of white collars - specialists whose effectiveness and efficiency directly depends on their intellectual potential and ability to apply it (Krotov, 2004). “Growing role of white collars and their productivity will lead to fundamental changes in structure and nature of our economic system in the next several decades” (Drucker, 2000).

Toffler describes this process in the following way: “New notion “mental work” is created. Only collection and transfer of information that has only symbolic expression is treated at higher levels under this notion” (Toffler, 1986).

At the meantime “... economic science would avoid to apprehend the laws of intellectual work as quite an independent form of social labor” (Goylo, 1994). “Can mental productivity be measured? Or it is totally imperceptible? The question of measuring this type of productivity will become central for management, investors and capital markets” (Drucker, 2000).

Categories “mental work” and “intellectual capabilities” are still considered to be non-measurable. However, quality assessment of

these categories (comparable with fuzzy sets in mathematics) still can be performed - they can be defined in terms of “better-worse,” “efficient - non-efficient,” “routine,” “breakthrough,” “new science,” etc.,. This only amplifies the importance and urgency of studying individual’s intellectual capabilities and ways to develop them as part of strategic workforce potential.

In private companies, no matter how big they are, the task of workforce development is handled by human resource department. In public companies and at the level of authorities this task is much more important and complex.

For civilization in general post-industrial period is compared with “informational society” (RyapISOV, 2007). Subsequently, “creative and intellectual skills become the most important out of all skills at the period when informational civilization is created” (Mihneva, 2006).

“Narrow qualification and specialization lose their value and get replaced by competence - wide range of skills, knowledge, experience and personal qualities that allow to switch professional areas with minimal time, resources and efforts necessary for re-training and adaptation” (RyapISOV, 2007).

3. INTELLECTUAL SKILLS

Intellectual skills are the only resource that allows to cope with the speed with which new knowledge is created nowadays. Information is updated so fast that the search for knowledge stopped being the destiny for lone individualists. Now it is created in mass production – another characteristic proper to post-industrial society (Drucker, 1993). As a result, methods of improving knowledge creation and increasing mental productivity will possibly be created in the nearest perspective. Knowledge will be renovated at an increasing speed - that happens to any industry when productive instruments are improved. Consequently, the process of transferring and adopting knowledge will have to be accelerated. At the upper extent, this creates the need to train specialists both in specific skills and methods of intellectual production (Mundrievskaya, 2010).

Innovative, creative approach to activity is a competitive advantage that has to be stimulated and developed. It is one of the most important skills at current and future levels of human civilization. People must know how to produce and use new skills and knowledge.

On one hand, production of new skills and knowledge is not an even and regular process. On the other hand, objects of intellectual activity generated as a result of applying these skills and knowledge become private property (Gorodov, 1994; Akgaldov and Karpova, 1998). Many authors say that innovational products are competitive advantage created by knowledge application. These products can be used by those who will be able to guess the precise potential of produced knowledge in terms of their innovational potential.

Consequently, one of the crucial ways to develop workforce potential is to advance its “intellectualization.” Modern education

is supposed to solve this task. Requirements to education can be stated the following way (Mundrievskaya, 2010): Education should be created and organized in a way that students not only do adapt, accumulate and update their knowledge, but also:

- Are able to produce new knowledge on their own;
- Are able to apply their knowledge in practice;
- Are able to identify and use innovational potential of the knowledge that they produce.

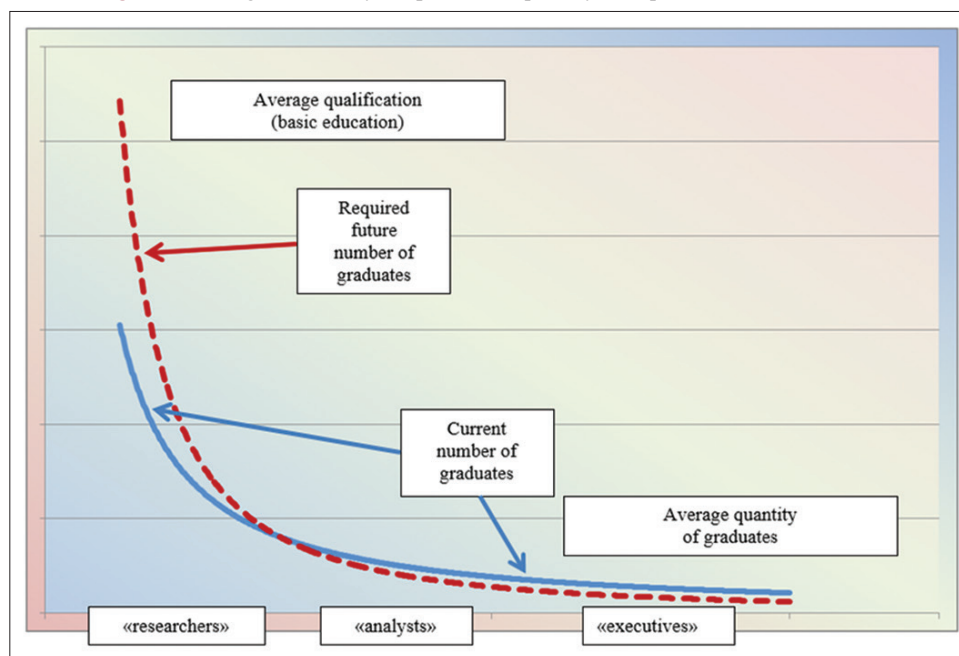
It is obvious that these creative students should be sufficiently motivated as well and this motivation should be developed since early childhood. Creative, exploratory and innovative potential of the society should be highly demanded by the society as well as appraised and stimulated which, unfortunately, is not the case of modern Russia.

4. MODERN EDUCATION

Statements and conclusions mentioned in the paper (Krotov, 2004) allow to state that one of the noticeable peculiarities of modern education is variety of planning horizons proper to different participants of educational process. For students and medium-sized business the horizon is 5-7 years, for larger corporations it is 10-15 and more years. In terms of strategy and goal-setting, the planning horizon of a country is tens of years. Thus, motivation and planning proper to students in years 1990-2000 mostly did not correspond to major directions in which economy and society developed (lawyers, economists, etc.). The result brings dissatisfaction to graduates who acquired such “qualifications,” to business that has to hire these “specialists” and to public authorities who has to retrain them. Imperfections in national forecasting, planning and motivational systems are an apparent reason for those.

It is quite obvious that modern role of the Government becomes exceedingly important. The Government is treated as main development “planner” - in terms of identifying the knowledge necessary to fulfill future education trends and in terms of creating an adequate motivation for future students.

The abovementioned leads to debates around modern postulation concept of changing goals of higher education from knowledge to competence. In the beginning of the article competence was defined as “possessing wide range of knowledge, skills and personal qualities needed to perform a transition from one professional area to another with minimal expense of time resources and efforts to retrain” (RyapISOV, 2007). Quite evidently, the statement “to perform a transition from one professional area to another with minimal expense of time resources and efforts to retrain” cannot be adapted to all types of professional activities. Competences necessary for management theory, enterprise economy, personnel management, hotel business and several other areas is inapplicable to exact and natural sciences, information sphere (This should mean not only home and tablet PCs but any activity and progress in computer technology - mobile communications, real-time video processing, advanced mathematic calculations require new skills and new technologies) and many other professional areas characterized by specific competences needed to succeed within.

Figure 2: Changes necessary in specialists' quantity and qualification

Competitional approach is effective, when society creates “executive personnel” (term mentioned in Bashina and Minashkin, 2014), i.e., an individual focused on solving mundane, routine, well-known tasks confidently which cannot be applied in all areas of activity, as mentioned above. Internal contradiction between competitional approach and regular higher education consists in opposition between current, momentary demand that creates need in exact competences and inability to forecast that demand for a certain period in the future necessary to teach students these competences.

Each society demands a certain number of “executive personnel” that will solve routine tasks. This demand, however, is true for “analysts” either - personnel able to identify patterns and links between factors and events, make well-grounded solutions and compose recommendations. Social need in “researchers” is relatively minor but they are the people that advance science, notice and solve new problems and stay on the edge of scientific and innovational progress. Another quality of genuine “researchers” is their ability to set goals. It separates them from other categories and requires special educational methods and dedicated approach that are not available in modern schooling methods. Ever accelerating progress calls for a certain ever changing proportion between “executive personnel,” “analysts” and “researchers” as shown at Figure 2 (The sketch is qualitative, quasi-hyperbolic distribution is proper for many natural object classes, i.e. distribution of natural diamond - large are scarce, small are numerous).

Quite natural would it be to suppose that various categories of specialists require different training courses and educational methods. At the first view, this difference consists in educational degrees - bachelor, master, postgraduate student, when master’s degree comes after bachelor’s level and extends the knowledge acquired at the latter. At the deeper view, the abovementioned difference also means that the courses themselves will vary

significantly - a bachelor of an average university will be specialized in solving a certain range of known tasks, a master - future “analyst” will have to study the subject at a much deeper level, gaining conscious understanding of scientific (mathematical) basis and applicability range of certain methods, etc.

5. CONCLUSION

To sum up (Conclusions of paper (Bashina and Minashkin, 2014) are used), the main goals of society and state in creating strategic workforce potential consist in the following:

- Long-term educational goals and strategy should be identified in a way that take in consideration the ever accelerating pace of technologic lifestyle, forecasts and foresights in economy, social life, basic sciences and technologies;
- Uniform national approach to motivation has to be created at all levels of social and economic life; it has to outstrip personal motivation in development of creative and research skills;
- Higher education and corresponding additional courses have to be modified in terms of both form and content - measure that allows to fulfill future social demand in “executive personnel,” “analysts” and “researchers.”

In conclusion, development and improvement of strategic workforce potential should be based on an adequate personal motivation and serious quality changes in both higher education and social demands forecasting.

REFERENCES

- Asgaldov, G., Karpova, N. (1998), Intangible assets and intellectual property: Problems and solutions. *Equity Market*, 4(7), 83-86.
- Bashina, O., Minashkin, V. (2014), Statistical education: Modern challenges (6th technological review – Challenges and perspectives in education). *Statistical Questions*, 6, 43-46.

- Drucker, P. (1993), *Post-economic Society*. Moscow: Academia.
- Drucker, P. (2000), *Manager's Tasks in 21st Century*. Moscow: Williams.
- Gorodov, O. (1994), "Property" and "intellectual property". *Intellectual Property*, 9(10), 3-9.
- Goylo, V. (1994), *Politic economy of intellectual labor*. *World Economy and International Relations*, 11, 137-146.
- Kravchenko, A. (2001), *Structure of Labor Organizations*. Moscow: Yurist.
- Krotov, V. (2004), *Organisational and Economical Mechanisms of Workforce Development in Culture*, Abstract, Thesis. Moscow: Institute of Economics, Management and Law.
- Mihneva, S. (2006), *Labor market, methodological and theoretical cognitive schemes (systematic and evolutionary approach)*. Volgograd: Polytechnic. p207.
- Mundrievskaya, E. (2010), *Creating and Developing Strategic Workforce Potential*, Abstract, Thesis. Tomsk: Tomsk State University.
- Neverkevich, O. (2008), *Influence of Modern Employment on Workforce Potential*, Abstract, Thesis. Moscow: Moscow University for the Humanities.
- Remenuk, A. (1999), *Regional workforce management, degree work, Russian academy of public administration under the president of the Russian Federation*. Moscow: RANEPa.
- Ryapisov, N. (2007), *Creating Competence Assessment Mechanism in Educational System to Improve Quality of Education – Abstract, Thesis*. Saint Petersburg: Novosibirsk State Pedagogical University.
- Toffler, O. (1986), *Future of labor*. New Western Technocratic Wave. Moscow: Progress.
- Verholazenko, V., Zvezdenkov, A., Hluneva, M. (1998), *Maslow's hierarchy plus – When self-evident becomes questionable*. *Russian and International Management*, 5, 33-48.