

Arkady A. Margolis

Plenary Report

Building the “Economy of Knowledge”: Perspectives and Problems

The relationships between economy and education are at the agenda in many countries and they may be regarded differently. I can figure out two main approaches.

First approach may be defined as: **education is constructed to meet the demands of economy.** If we refer to the current situation in Russian professional education, many experts from both spheres admit that education responds to the “signals” from economy to very little extent. Skilled laborers are required but not actually prepared; all the educational facilities are focused on specialists in economy and law. The proposed model of education, oriented towards economy demands, is surely a working and practical one.

But it does not seem the most optimal one: if education is “tailored” according to the current economical situation, it lives for today or even fulfils yesterday’s task. If economy creates “glass ceiling” for education they will not benefit in long-term perspective and will not be able to compete with the other countries in the international community. Thus, another view on relationships between economy and education is worth analyzing. I would name it, in the terms of cultural-historical psychology: **education attempts to create zone of proximal development for economy of tomorrow.**

That is the aim of Russian education as well as the Russian government. The government pays more attention to the second model because it is necessary for developing an economy not limited to exporting natural resources such as gas and oil. Since these resources are limited we must start developing of the new economy, knowledge-based economy now. As a result, educational system should focus not only on meeting the current demands for preparation of a range of qualified specialists but also on preparation of so-called “**creative class**”, people, able to create something new. By doing this they will facilitate development of the new economy that is usually called “**economy of knowledge**”.

In discussing this type of relationships between economy and education I would like to emphasize three key notions as important educational targets.

First, tightly connected with the notion of “knowledge economy” is **learning skills**. We must admit that the information itself – be it gained at preschool or university level – loses its topicality rather quickly. If we want to see competitive specialists, we must teach them how to get and construct new pieces of knowledge.

The second important topic that is already on the agenda is **security**: both subjective and objective.

And the third theme is **ability to work with diversity**. Educational system of tomorrow has to elaborate the above-described three issues. From this standpoint I will try to address the issue of investment into education. Two questions are crucial here.

Firstly, what to start from and how to get the results? Certainly, I cannot give an exhaustive answer for this question but can figure out some targets. The empirical base, Russian and international, provides evidence that education should start from the early age. From economical point of view investment into early age are the most efficient and from psychological standpoints this age is the most sensitive, so any wrong intervention or necessary steps missed demand more investment with correctional purpose.

And the second factor is a **teacher's** figure. We can speak about investments into education not only as financial investment in a narrow sense but also as modernization stemming from these investments. But without proper (meeting the three criteria: learning skills, security, ability to work with diversity) teachers' preparation none of the plans can be implemented. The problems are: selection into the profession, level of payment, level of preparation, assessment of his preparedness and competences.

In Russia the situation with selection is not a favorable one: as we know from the Unified State Exam, the entrees of pedagogical universities have low points. What is meant by "low"? Rospotrebnadzor (Russian Consumer Surveillance) provides the statistics showing that most of pedagogical universities admit entrees with 55 points (of 100) and less – it is closer to "C" grades.

If we take far not the best students, who enter pedagogical universities, and then we have very low quality of professional preparation of future educators who teach weak pupils again, we get a vicious circle very hard to break. If we don't find the way to attract good student to pedagogical education and motivate them to stay in the profession, the other issues will remain unresolved.

Usually the most popular idea is raising teachers' salaries. Since it differs in different Russian regions, we can speak about a kind of experiment performed within the last 5 years. Teachers' salary in Moscow has overcome average salary in this city. As a result, almost all the vacancies have been closed including ones of foreign language teachers (that used to be rather rare profession some time ago). We have the opposite examples in some other regions where teachers' salaries remain the lowest. It turned out that we cannot judge the quality of educators'

activity by their salary nor we can state that the quality of Moscow education is significantly higher compared to the regions. Of course, salary is an important factor but salary increase alone is not enough for education quality improvement.

One of possible interpretations is the following. Moscow as a large megapolis offers the whole range of leading universities and of popular professions, so the best students choose the most prestigious and well-paid ones, leaving pedagogical universities for weaker students. In the countryside a pedagogical university is often the only higher education facility as well as the socio-cultural centre of the region, so a good school alumnus actually has only one option. So countryside pedagogical universities admit entrants who are better prepared and more motivated to stay in the profession because this job provides some social guarantees and looks more attractive than business activities at the countryside labour market.

The second key factor is teachers' preparation. Profound processes of modernization of the contents of professional higher education (including pedagogical) have been undertaken recently: third-generation educational standards for educators and educational psychologists have been implemented. These standards is a step forward to the type of education we are discussing. For example, "The Standard of Psychological and Pedagogical Education" designed by the Moscow State University of Psychology and Education attempts to join competences of an educational psychologist and elementary / preschool teacher. It does not just introduce more time for studying psychology of preschoolers, but creates the base for preparation necessary for comprehensive approach to a child's development – be it gifted children or children with special needs. The Standard positions learning and development as the twofold process of education.

The teacher, oriented towards development of education and economy of tomorrow, must operate in a different system of normative regulation. At the moment a university diploma is the "ticket" to professional employment. The Russian Ministry of Science and Education has introduced the new assessment procedure, i.e. qualification exam. It is a routine procedure in many countries that can be provided by a state body or a professional community. We regard it as an important measure for increasing professional level of the future educators.