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## EDUCATION FUNDING SYSTEM

IN AZERBAIJAN AS ONE OF THE MAIN DIRECTIONS OF THE STATE STRATEGY FOR THE DEVELOPMENT OF EDUCATION

### SISTEMA DE FINANCIACIÓN DE LA EDUCACIÓN EN AZERBAIJAN COMO UNA DE LAS DIRECCIONES PRINCIPALES DE LA ESTRATEGIA ESTATAL PARA EL DESARROLLO DE LA EDUCACIÓN

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#### ABSTRACT

Education is an important issue addressed by all countries, so all of them have adopted strategic action plans, in one way or another, related to its development. However, in many countries, the education system does not meet modern requirements as it is reflected in the reports adopted by the relevant international educational and financial institutions. In this regard, the process of financing the education system is a weak point, so efforts must be made to improve this factor, specifically from two important aspects: the amount of funds allocated for education and their effective use. It is clear that the problem of financing education as a whole is adjacent to the problem of the quality of education, since they are closely interconnected. In the last decade, much of the attention at international meetings has been focused on the lack of funding for basic education, rather than on the efficiency and effectiveness of recurrent spending. But as the issue of quality becomes more relevant and data emerges that track non-governmental organizations inefficiencies and government spending diversions, the focus is on financial gaps as well as spending efficiency. Taking this into account, the aim of this paper is to analyze the efforts and experiences in Azerbaijan in the field of education funding.

**Keywords:** educational strategy, educational system, funding, educational legislation.

#### RESUMEN

La educación es un tema importante que abordan todos los países, por lo que todos ellos han adoptado planes de acción estratégicos, de una forma u otra, relacionados con su desarrollo. Sin embargo, en varios países, el sistema educativo no cumple con los requisitos modernos, como se refleja en los informes adoptados por las instituciones educativas y financieras internacionales pertinentes. En este sentido, el proceso de financiamiento del sistema educativo es un punto débil, por lo que se deben realizar esfuerzos para mejorar este factor, específicamente desde dos aspectos importantes: la cantidad de fondos destinados a la educación y su uso efectivo. Es claro que el problema del financiamiento de la educación en su conjunto es contiguo al problema de la calidad de la educación, ya que ambos están íntimamente relacionados. En la última década, gran parte de la atención en las reuniones internacionales se ha centrado en la falta de financiamiento para la educación básica, más que en la eficiencia y eficacia del gasto recurrente. Pero a medida que el tema de la calidad se vuelve más relevante y surgen datos que rastrean las ineficiencias de las organizaciones no gubernamentales y las desviaciones del gasto público, la atención se centra tanto en las brechas financieras como en la eficiencia del gasto. Teniendo esto en cuenta, el objetivo de este artículo es analizar los esfuerzos y experiencias en Azerbaiyán en el campo de la financiación de la educación.

**Palabras clave:** estrategia educativa, sistema educativo, financiación, legislación educativa

## INTRODUCTION

The development of education is one of the important areas in the political, socio-economic, and strategic lines of every state. The development of education is one of the most important factors that stimulate the socio-economic development of the country as a whole (Guliyeva & Azizova, 2022). Thus, the existing legislation, development strategy and action plan in the field of education are drawn up and approved considering all social criteria. In the conditions of the formation of the post-industrial stage of the development of the society, the repeated social production in the world is carried out on the basis of the innovative development of the national economy. This challenge poses new tasks, such as the formation of a new type of modern human resource with a wide range of integrated, competence-based knowledge and a high share of the intellectual component in human potential. Also, it requires multifaceted modernization of educational activity and its financial support system. In numerous studies devoted to the problems of the financial health of the education system, it is noted that despite the increase in the volume of state investments in educational activities in recent years, the problem of lack of funds for the financing of the vocational education system still remains relevant.

There is a need to find new financial sources, methods of their mobilization, as well as common aspects of the public-private partnership, which combines the strategy and tactics of improving the financial mechanism of the education system on a single organizational-methodological basis (Lingo et al., 2021). If there are normative-legal bases for the implementation of this procedure, investment infrastructure serving the relevant process, public administration bodies, private capital, vocational education institutions can participate in the implementation of joint cooperation between the state and the private sector (Olagüe-Smithson, 2019).

In the world experience, the process of financing education is carried out in several directions. The most important financial source is, of course, the state budget (Roser & Ortiz-Ospina, 2016). In each state, the share of the state in the process of financing education is very high. However, this financing procedure itself is carried out in different ways. Direct financing is an integral part of the strategy of ensuring the social welfare of the population and equal education in countries with a compulsory education system. Indirect financing from the state budget consists of the profit obtained by various educational institutions (primarily higher and secondary specialization) on the basis of state orders.

In our view there are several ways of off-budget financing of education (Lingo et al., 2021):

1. **Funds allocated by the population for education.** Every family spends a certain part of their income on education in one way or another. In many countries, financial processes such as the purchase of various supplies, teaching aids and school uniforms for students in general education institutions are covered by the population themselves. This tradition, widespread in international practice, exists in all areas of formal education.
2. **International education funds.** There are several educational funds operating on the development of education, and the low-income part of the population is provided with certain educational materials at the expense of their allocated funds for education. At the same time, financing of laboratory and experimental spaces of leading universities for the implementation of innovative projects and various scientific inventions is carried out by these funds. For example, the Global Cooperation Organization in the field of Education cooperates with many countries in the field of gender equality in education, raising the level of education in poor countries and other areas.
3. **Grant projects.** Although some of the grant projects allocated to education are financed by the state, in most of the developed countries, the grant projects are implemented through private institutions. For example, in the United States, there are several main types of grants: independent grants – grants awarded using a competitive process; student grants – student loans to help students study, mainly at university (college) (Arrow, 1962); formula grants – grants that are determined by the state Congress and do not have an independent application process.
4. **Tutors.** In addition to traditional education, one of the types of informal education is implemented through tutoring. In several countries, in order to develop in a specific field of science, in addition to the general lesson time, preparatory exercises from certain lessons are also carried out. Although the role of tutoring activity in the financing of the education system sometimes seems small, in fact, the income from this field makes up 1 percent of the country's GDP in many countries (Burnett, 2010).
5. **Public legal entity or educational institutions with private status.** The share of private educational institutions in international practice is increasing more and more. Here, although the state has a certain share in the financing process of the institute, most of the financing is carried out at the expense of the enterprise's own income. There are even educational institutions in the world that pay a large amount of tax from their personal income to the state budget. Here,

the paid education system and private orders are the main source of income.

There are also a number of individual factors in the financing of the education system, where certain philosophical and cultural dogmas play an important role (Glomm et al., 2011). For example, there are a number of countries based on meritocracy in public administration, and at the root of this management system, significant amounts of money are spent so that parents can give their children a higher education and take a place in administrative management in the future due to their knowledge and skills.

At the stage of modernization of higher education, taking into account the multifaceted nature of the problem of its financial recovery, effective efforts are made to expand the income base of educational institutions, including the state educational institute, and at this time, the establishment of a private partnership and flexible financial management model is outside the scope of the study. However, in the context of challenges aimed at the modernization of education in the world, new tasks are set (Vodolazskaya, 2019; Yang & Fan, 2021). In particular, certain problems of financial management, state regulation of the financial and economic activity of educational institutions, directions for deep and large-scale research on optimizing the volume and structure of financial support sources for the industry in solving new problems should be determined.

Problems of socio-economic development of the country, the efficiency of using resources in this area, improvement of taxation and a few other important factors have certain solutions from a methodological point of view. There is, of course, a basis for joint financing of education by the public and private sectors. However, it is very important to develop concrete methods for reducing the burden on the state budget and for the private sector to receive income from the development of education. Taking this into account, the aim of this paper is to analyze the efforts and experiences in Azerbaijan in the field of education funding.

## DEVELOPMENT

The reality is that education is, in a sense, a private asset that benefits the individual, and it is also a public asset that benefits society as a whole. The most perfect example of this is reflected in the application of Kenneth Arrow's theory of "learning by doing" (1962): a person's performance (and the salary he receives in return) depends not only on his own level of education, but also on the level of education of his colleagues. In other words, no reasonable person would doubt that higher education depends not only on individual demand and its future, but also on

the joint development of research, technocracy and other important supply criteria.

The fact that all members of society have equal opportunities, regardless of the circumstances of their birth, is considered a great public asset, along with all the known benefits it brings to society as a whole. Where these arguments are most ambiguous is the level of general education. Thus, for most developing countries, higher education and at least some part of general secondary education creates an environment that is more dependent on tuition fees. Then the main questions that arise are related to wage levels, authorized capital and credit agreements. Then, it is necessary to have a rational and non-ideological approach to the interpretations of the Universal Declaration of Human Rights and other international documents related to the right to education. They should also be reconciled with the approach to the distribution of state spending on education by sub-sectors.

One of the greatest achievements of the Azerbaijan state in the field of education development is the existence of equal opportunities for everyone to receive education within the framework of the legislation, regardless of race, gender, nationality and religious belief (Babayeva, 2022). The fact that private funds were allocated to the Girls' School, built in Baku in 1901, especially for the education of girls (thanks to the work and personal funds of the prominent tycoon Haji Zeynalabdin Taghiyev), clearly proves that equal education has deep historical roots in Azerbaijan. It is the existence of opportunities for everyone to receive equal education within the framework of the legislation.

One of the main strategic components of the state strategy for the development of education is the strengthening of the material and technical support base. Here, renewal (modernization) is carried out in two main areas. The first area is the modernization of the infrastructure of educational institutions. In order to ensure quality education in the center and at the regional level, a number of construction and repair and restoration works are regularly carried out. In recent decades, more than 3600 school buildings and infrastructure have been renovated in Azerbaijan. The second area is the improvement of legislation in the field of education. In order to apply teaching methods accepted at the international level, a number of changes are made in the legislation, which serves to increase the quality of education in the pedagogical direction. It should be noted here that the professional level of teachers should be increased (Rust, 2019; Tatto, 2021). But also, the economic criteria involved in the development of education have to be addressed. For example, the preparation of teaching resources based on flexible programs that are

suitable for the requirements of the modern era, as well as the psychological readiness of the students, and the provision of schools with modern information and communication technologies (Hasanova et al., 2019). All these processes are carried out step by step.

There are also areas of special importance in the education financing process. These are the definition of inclusive education criteria and the integration of every citizen of Azerbaijan into the labor market, as well as the expansion of the activities of vocational training schools. For example, raising the level of distance education is one of the important issues in our country in an environment of global pandemic conditions (Jafarova, 2021). The provision of distance education depends primarily on the readiness of Internet resources for the course load and flexible adaptation to new conditions. Here, the psychological and technological preparation of both teachers and pupils plays an important role. Of course, this also constitutes a new area of funds allocated to education. This process has become one of the main factors determining the organization of a new concept emerging in the global environment - smart schools.

“Smart schools” is an electronic education system - a system of teaching knowledge and skills with the help of digital technologies. The main goal of applying the system in schools is to create a comfortable and safer environment in pandemic conditions based on modern information and communication technologies. “Smart school” system belongs to the class of automated information systems. Technically, the system is implemented as a software-hardware complex, including information provision, and it can be functionally divided into the following components: monitoring system - creation and management of lesson schedules, analytical reporting system, evaluation of students’ academic indicators and students’ knowledge and skills through the test examination system, real-time observation of the lesson, availability of the school database and electronic library at any time of the day; smart classroom - provision of lesson management program, attendance control, homework solution, interactive whiteboard and training system through e-books and e-journals; smart terminals – availability of separate electronic terminals for teachers and students, etc. (Cabbarov, 2022).

Distance education’s relationship to the economic burden is different. On the one hand, if it is true that some costs are reduced like daily transportation of the students, on the other hand it is required to spend certain funds for the implementation of material and technical support. That is why the process of financing distance education requires a different approach.

As development strategies vary across countries, education costs also vary. To the extent that low-income countries remain poorer than high-income countries, the gap in spending per educated person continues to widen. Indeed, the cross-country variation in per-pupil education spending is now much greater than the variation in GDP-like spending. One factor that contributes to a better understanding of per-student costs in real terms is that teacher salaries, a major component of education costs, are higher in high-income countries because labor is more remunerative in these countries. Overall, labor evaluation is a key criterion for governments in developing countries to consider when making decisions about educational development.

Here, the importance given to preschool education and the allocated funds are also of special importance. The environment that children encounter at an early age plays an important role in the formation of their abilities, behavior and talents (Ardoin & Bowers, 2020; Sakr & O’Sullivan, 2022). To a large extent, this is one of the factors that lead to large and persistent educational gaps between people in the same country but with different socio-economic backgrounds. For each country separately, the theory and evidence behind these processes should be refined and the implications for education policy making should be determined. The Perry Preschool Program, a pioneering pilot study designed to test the effects of preschool education, found that disadvantaged children (the “treatment group”) who participated in the preschool program had higher grades and were more likely to graduate from general or full high school than the control group (Rosier & Ortiz-Ospina, 2016). In addition, they spent significantly less time on special education. Other programs have also shown that early education policies provide strong and lasting benefits.

In the process of education financing, the general structure of the educational institution, the teaching model, and the financial base are of great importance. World practice proves that the most effective mechanism for the development of a new financial model of education in the conditions of globalization is the creation of education, science and innovative consortium-type educational complexes, their activity should be directed to the development of specialized clusters. The features of the investment and innovation model of financial interaction between representatives of science and education can form a new financial model for the organizational and economic development of innovations in the field of education as the most important resource factor of the national economy and ensure the competitiveness of national universities and the formation of practice-oriented fundamental science.

One of the important tasks facing the recently established Ministry of Science and Education in Azerbaijan is the implementation of projects in this direction. The activity of cluster-type scientific and educational institutions also creates fertile conditions for the development of applied knowledge. The global trend of introducing co-investment mechanisms in education by private business and the state is accompanied by the development of new special and targeted financing mechanisms. Creation and improvement of the legal basis of the “state-business partnership” system in the field of education is one of the practical areas regularly applied in international practice (Cabbarov, 2022). The activity of cluster-type scientific and educational institutions also creates fertile conditions for the development of applied knowledge. The global trend of introducing co-investment mechanisms in education by private business and the state is accompanied by the development of new special and targeted financing mechanisms.

On the one hand, the allocation of funds from the budget among educational institutions to the direct allocation of funds to students, as well as the transition from direct to indirect use of financing methods should take place. On the other hand, financial instruments for the collection of private resources directed to education (private lending and education insurance) should be formed. New forms of higher education financing around the world include education loans, available grants, education insurance and student financial support systems. As mentioned above, the formation of education student loans in Azerbaijan is one of the most important steps taken in this direction. Several factors come together here:

1. The state encourages credit institutions (banking sector, etc.) to allocate funds for the development of education. When students are given credit, the borrower obtains a guarantee that it can be returned by any person (parent, relative, employer, etc.) on his or her behalf. This in itself attracts financial institutions to the financing of education.
2. There are social and standard types of education student loans, which greatly support the financing of the educational process of students with a weak social status. At this time, the student gets a new motivation to be able to pay off the loan debt with more financial income.
3. One of the conditions for students who have the right to receive standard credit is that the general average educational indicator is above 71 points on a possible 100-point scale. Students receiving paid education are expected to pay at least 20 percent of the annual tuition fee.

It can be concluded from this that the participation of the public-private sector in educational and scientific activities, in addition to direct financial support from centralized funds, can include the following forms of state support for projects:

- providing credit resources to investors on the basis of certainty of return, urgency and payment.
- providing a guarantee on the basis of the conditions of keeping a part of the shares of joint-stock companies issued “under the project” in state ownership.
- providing guarantees for the return of a part of the funds invested by the investor in case of failure of the project through no fault of the borrower.

One of the procedures implemented within the framework of the creation of a new system that ensures the constant improvement of the level of professionalism of educational institutions is the promotion of the creation of additional education structures in higher education institutions. Since additional education is clearly paid, it brings additional income to the financial base of organizations financed from the state budget. In accordance with the “Action Plan” developed on the basis of the “State Strategy for the Development of Education in Azerbaijan”, since 2017, the mechanism for the approval of the mechanisms for the creation of a new salary and stimulation system for teachers, new mechanisms for the allocation of financial resources for the new system have been launched. Improving the professionalism of teachers in order to obtain more income is one of the important factors that stimulate the general development of education.

The creation of education management information systems and a new reporting model combines several electronic procedures. This is mainly carried out in two directions: creation, updating and use of databases, graduate-coordination-information systems in educational institutions and their use in the management process; creation and implementation of the system of regular study of the labor market. Due to the monitoring of demand and supply in the labor market, the determination of planning places in higher and secondary education institutions is one of the most important factors affecting the socio-economic development in the future. So, if there are enough specialists in a professional field, more space should be allocated to this field and vice versa providing less space in the education plan for areas where there is a lack of personnel may result in a disruption of the social balance. Also, in the “Socio-economic Development Strategy of the Republic of Azerbaijan in 2020-2026”, which was recently approved by the head of state (by the Decree dated July 22<sup>nd</sup>, 2022), there will be access to higher education for the children of all families, regardless of income,

as a result, the admission of students to higher education is planned to increase by 20,000 people.

Other of the important projects included in the Azerbaijan model of education financing is the creation of the Education Development Fund by the decision of the Republic of Azerbaijan No. 68 dated March 1<sup>st</sup>, 2020. The most important funds included in the fund's income are extra-budgetary funds of educational institutions under the Ministry of Science and Education of the Republic of Azerbaijan, deductions from the income obtained from the provision of paid educational services; donations, grants, and investments; as well as income from the activities of the Fund. This project ensures the existence of a single base of funds used by educational institutions for the development of education. Another public legal entity created under the Ministry of Science and Education is the Vocational Education Development Fund.

The analysis of advanced international experience shows that the investor in the field of education should be able to participate in solving the following problems: renewal of teaching, laboratory and material-technical base; creation of experimental sites for industrial and undergraduate experience in public employment agencies and private organizations; development of necessary elements of innovation infrastructure of universities to ensure innovative activity of companies; involvement of students and teaching staff in the implementation of scientific-research works and the preparation of projects for solving specific business problems, etc. Thus, the general direction of the modernization of the education financing mechanism involves expanding the independence of educational institutions in the disposal of financial resources and increasing the efficiency of their use, which involves the initiation of self-regulation processes in the education system.

Among the socio-economic aspects of education financing, economic freedom also occupies an important place. International experience shows that the implementation of the financial mechanism based on "public-private partnership" during the modernization of the education system is the most important condition for the transition of the teaching process to the method of creative pedagogy focused on non-research. We are talking about the search for such forms in the educational process, in which the student will have the opportunity to form a knowledge system independently of the information obtained in the learning process, to correct it based on the analysis of new knowledge and personal experience, that is, he will be ready to change the paradigm bases and face the future with optimism.

The basis of the newly adopted organizational-economic mechanism of education financing should be the principle of transition from separate financing of higher education to joint investment based on the mutual responsibility of the state and business community. At the modern stage, the development of human potential, socio-economic trends, society and the labor market depend on the development of education based on the requirements of the economy. If the parties share the risks of investing in education and the responsibility for the efficiency of using economic resources in the educational activity system, a healthy environment is formed for both the development of education and the creation of free business competition (Ahmadov, 2022).

## CONCLUSIONS

The process of financing education is a process that directly affects the socio-economic well-being of the country and requires long-term investment. As stated in the declaration adopted by more than 120 countries of the world in Incheon, Korea in 2015, it is aimed that the funds allocated to the development of science and education will be 4-6% of the GDP of each country or 15-20% of the state expenses due to the financial support of the countries that are supporters. The aim is to provide inclusive and equal quality education and create lifelong learning opportunities for all. It is based on a humanistic concept of education and development focused on human rights and dignity, social justice, inclusion, protection, cultural, linguistic, and ethnic diversity, as well as shared responsibility and accountability.

For the first time in the history of the world, the financing of education on a global scale has been addressed into large-scale goals. Then, within the national legal and political boundaries, Azerbaijan has also contributed to the implementation of such global projects. As in several countries of the world, the financial resources allocated by the state of Azerbaijan for the construction and restoration of educational institutions maintain their priority position among the goals aimed at the global development of education. As it was analyzed in the work, the state actions executed in this sense are varied and work is carried out with a coordinated strategy that allows the continuous development of this field, and although it is still necessary to improve policies, the results of the efforts are each ever more noticeable.

## REFERENCES

- Ahmadov, H. H. (2022). Modernization of the education system is one of the priority areas in the development of strategic human capital. *Azerbaijan Teacher*, 7(2), 123–125.
- Ardoin, N. M., & Bowers, A. W. (2020). Early childhood environmental education: A systematic review of the research literature. *Educational Research Review*, 31, 100353. <https://doi.org/10.1016/j.edurev.2020.100353>
- Arrow, K. J. (1962). The Economic Implications of Learning by Doing. *The Review of Economic Studies*, 29(3), 155–173. <https://doi.org/10.2307/2295952>
- Babayeva, G. (2022). Gender equality in the education system of Azerbaijan Republic. *Collection of Scientific Papers « ГО », July 8, 2022; Paris, France*, Article July 8, 2022; Paris, France. <https://doi.org/10.36074/logos-08.07.2022.074>
- Burnett, N. (2010). *Strategies for financing of education: A global view*. International Institute for Educational Planning. <https://www.r4d.org/wp-content/uploads/Strategies-for-Financing-of-Education.pdf>
- Cabbarov, M. (2022). *Socio-economic development strategy of the Republic of Azerbaijan in 2020-2026*. Baku city.
- Glomm, G., Ravikumar, B., & Schiopu, I. C. (2011). The Political Economy of Education Funding. In E. A. Hanushek, S. Machin, & L. Woessmann (Eds.), *Handbook of the Economics of Education* (Vol. 4, pp. 615–680). Elsevier. <https://doi.org/10.1016/B978-0-444-53444-6.00009-2>
- Guliyeva, S., & Azizova, R. (2022). Methodology for Assessing and Predicting the Rate of Development of Education in the Republic of Azerbaijan. *WSEAS Transaction Environment and Development*, 18, 962–971. <https://doi.org/10.37394/232015.2022.18.92>
- Hasanova, Z., Huseynova, A., & Mazanova, O. (2019). The state of application of electronic systems in higher Education in Azerbaijan. *Economic and Social Development: Book of Proceedings*, 528–531.
- Jafarova, S. (2021). Organization of distance education in Azerbaijan. *Azerbaijan School*, 4(697), 105–110.
- Lingo, M., Kelchen, R., Baker, D., Rosinger, K., Ortagus, J., & Wu, J. (2021). *The Landscape of State Funding Formulas for Public Colleges and Universities*. InformEd States. Higher Education Policy Initiative.
- Olagüe-Smithson, C. de. (2019). *Analysing Erasmus+ Vocational Education and Training Funding in Europe* (1st ed.). Springer International Publishing.
- Roser, M., & Ortiz-Ospina, E. (2016). Financing Education. *Our World in Data*. <https://ourworldindata.org/financing-education>
- Rust, F. O. (2019). Redesign in teacher education: The roles of teacher educators. *European Journal of Teacher Education*, 42(4), 523–533. <https://doi.org/10.1080/02619768.2019.1628215>
- Sakr, M., & O'Sullivan, J. (2022). *Pedagogical Leadership in Early Childhood Education: Conversations From Across the World*. Bloomsbury Publishing.
- Tatto, M. T. (2021). Professionalism in teaching and the role of teacher education. *European Journal of Teacher Education*, 44(1), 20–44. <https://doi.org/10.1080/02619768.2020.1849130>
- Vodolazskaya, N. (2019). Types and ways of modernization in a context of the international experience. *Virtual Economics*, 2(1), Article 1. [https://doi.org/10.34021/ve.2019.02.01\(5\)](https://doi.org/10.34021/ve.2019.02.01(5))
- Yang, W., & Fan, G. (2021). Breaking Barriers: A Strategic Choice to Promote the Modernization of Education Governance at a High Level. *Journal of East China Normal University(Educational Sciences)*, 39(8), 94. <https://doi.org/10.16382/j.cnki.1000-5560.2021.08.008>