

EDUCATIONAL LOSSES OF STUDENTS OF BASIC
SECONDARY EDUCATION: THE UKRAINIAN EXPERIENCE
OF DIAGNOSTIC AND COMPENSATION

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Rezumat: *Articolul actualizează problema diagnosticării și compensării pierderilor educaționale ale elevilor din învățământul secundar general cauzate de întreruperile îndelungate în învățământ din cauza situațiilor de urgență. Au fost analizate domeniile de compensare a pierderilor educaționale, principalele fiind creșterea duratei de învățământ, programe educaționale corective pentru anumiți elevi sau o clasă separată, tehnologii de învățare adaptativă pentru anumite grupuri de elevi cu nevoi educaționale relevante, programe de scurtă durată, entru a compensa pierderile educaționale prin procesarea suplimentară a problemelor individuale în timp suplimentar. Atenția se concentrează asupra problemei compensației pentru pierderile educaționale pe scară largă ale studenților din învățământul secundar general din Ucraina cauzate de agresiunea armată, care a dus la distrugerea infrastructurii educaționale, la încălcarea unui mediu educațional sigur și la interacțiunea participanților la procesul educational, din cauza strămutărilor forțate în interiorul țării și în străinătate.*

Cuvinte-cheie: *pierderi educaționale; elevii din învățământul secundar de bază; mecanisme de diagnosticare și compensare a pierderilor educaționale.*

Abstract: *The article updates the problem of diagnosing and educational losses compensating of students of general secondary education caused by long interruptions in education due to emergency situations. The areas of compensation for educational losses were analyzed, the main ones being the increase in the duration of education, corrective educational programs for specific students or a separate class, adaptive learning technologies for certain groups of students with relevant educational needs, short-term programs to make up for educational losses with additional processing of individual issues in additional time. Attention is focused on the problem of compensation for large-scale educational losses of students of general secondary education of Ukraine caused by armed aggression, which led to the destruction of educational infrastructure, violation of a safe educational environment and interaction of participants in the educational process due to forced displacement within the country and abroad.*

Keywords: *educational losses; students of basic secondary education; mechanisms of diagnosis and compensation of educational losses.*

One of the urgent problems of modern world educational practices is the search for mechanisms for diagnosing and overcoming educational losses, as a factor that negatively affects the quality of education and deepens educational inequalities. Under the educational losses of students of general secondary education is meant the gaps in knowledge, abilities and skills that arise in students as a result of planned or unplanned stops in the educational process, caused by external factors that do not depend on the students of education, or circumstances of a personal nature. There is a comparing of the level of real learning results of a group of students or a specific student with the expected results determined by education standards to characterize the degree of educational losses.

Educational losses are considered in a broad context to assess the losses of the educational system, educational process and learning outcomes. They have a cumulative effect and limit an individual's capabilities, as well as reduce the pace of his intellectual, social, emotional, and psychological development.

Educational losses are associated with losses in knowledge, abilities, skills, rates of academic development of a particular student, caused by long breaks in education. The main factors in the occurrence of educational losses are summer vacations, which are the normal operating conditions of the educational system, after which the level of success of students usually decreases and the gap between their academic results increases. Therefore, at the beginning of the new academic year, teachers implement a system of organizational and pedagogical measures aimed at their compensation (repetition of educational material, updating of educational and cognitive activities etc.).

Emergency situations caused by man-made crises, pandemics, and the introduction of martial law are an extremely powerful factor that causes large-scale educational and training losses. After all, a long-term suspension of traditional education (for several months) leads to significant losses of the gross domestic product over the next few decades.

Although educational losses are also present during face-to-face education, they grow rapidly in the conditions of the transition to a remote form of organization of the educational process, in particular, when education is mainly carried out in an asynchronous mode. The study of the advantages and disadvantages of the international practice of distance learning against the background of quarantine restrictions caused by the coronavirus infection shows that the replacement of traditional forms of organization of the educational process led to significant educational losses and had a noticeable impact on the global processes of social and economic development: educational losses negatively affect the personal development of students education; deepen inequalities in education due to growing educational gaps and affect the well-being of a specific person and the state as a whole in the future.

The level of educational attrition is influenced by family income, since children from wealthier families have more modern equipment and better access to

the Internet. Parents' education and their activity in participating in the educational process, interest in the child's education and support, willingness and ability to create a suitable educational space at home and provide didactic materials for distance learning also have an impact. Educational losses have a cumulative effect and negatively affect the personal development of education seekers, deepen inequalities in education due to the growth of educational gaps, and it will significantly affect the well-being of a specific person and the state as a whole in the future (Liao et al., 2022).

During distance education, educational losses grow in proportion to its duration and accumulate regardless of the peculiarities of the educational systems of different countries. The main factors that lead to the accumulation of educational losses in online education are the imperfection of technologies for the organization of distance education; lack of digital learning tools with appropriate technical characteristics that education seekers and teachers have to have, as well as access to uninterrupted and high-speed Internet; insufficient level of formation of digital literacy and competence of self-training educational and cognitive activities among students, and therefore a constant need for active feedback from teachers; insufficient level of development of digital competence among teachers, their readiness to apply distance learning technologies in practice; parents' unwillingness to provide support for children's online education etc.

Educational losses are especially noticeable for the science education field of general secondary education and the disciplines of fundamental training of future technical specialists, as mastering them remotely, pupils and students do not have the opportunity to work with real devices in laboratories, which negatively affects the formation of experimental skills.

The main mechanisms for compensating educational losses are: increasing the duration of education due to the reduction of vacations; introduction of a six-day school week; implementation of accelerated education programs, which involve the consolidation of educational material and focusing on the key issues of the program; adjustment educational programs in the form of individual classes for an individual student or group of students; adaptive learning technologies, in which the class is divided into separate groups that work outside the main school hours to eliminate specific gaps in knowledge and skills in accordance with the educational needs of the students; short-term programs to make up for educational losses, aimed at additional processing of certain issues during extracurricular hours or during weekends etc. Such programs provide for the individualization of the educational process and high motivational, physical and psycho-emotional activity of those seeking education. Therefore, preliminary diagnosis is an extremely important stage. The mechanism for its implementation should be a system of educational measurements based on standardized tools (standardized testing at the final stages of primary and basic education, nationwide monitoring of the quality of education, local monitoring of certain categories of education

seekers, digital platforms for measuring educational losses etc.) (Topuzov et al., 2023).

The problem of educational losses among students of general secondary education in Ukraine has worsened in the conditions of martial law. The increase in educational losses is due to the destruction of educational infrastructure, damage to educational institutions, disruption of traditional communications of subjects of the educational process, forced displacement of students and teachers within the country and abroad. At the same time, occasionally, distance learning is the only means of access for applicants to educational services.

The use of traditional methods of compensation for educational and training losses is complicated by the presence of different categories of students, depending on their location: temporarily occupied territories; de-occupied territories; territories near active combat zones; relatively safe areas; abroad.

In view of this, it is urgent to develop comprehensive mechanisms for compensation of educational losses, which take into account the peculiarities of different categories of students of general secondary education. Considering these circumstances, the most relevant are:

specification of mandatory learning outcomes and definition of key elements of the content of learning school subjects and diagnosis of the levels of their formation; offloading and strengthening the flexibility of educational programs; development and filling up of open digital educational platforms and resources that can be dynamically updated taking into account the educational needs of specific categories of education seekers; development of a system of didactic materials for diagnosing and compensating of educational losses; development of methodological recommendations for teachers; creation of organizational and economic mechanisms to provide teachers and students of education with modern digital means of education, first of all, students from socially vulnerable categories; improving communications between participants in the educational process; development of digital literacy in students and teachers; implementation of educational programs for training graduates of pedagogical universities and improving the qualifications of teachers regarding the organization of distance and mixed learning, the use of diagnostic tools and technologies for compensation of educational losses; development of methodical systems that support individual educational trajectories of students; introduction of updated financing mechanisms for measures to compensate educational losses and pay teachers; strengthening the partnership of educational institutions, students, teachers, parents and the community regarding the development of mechanisms for compensation of educational losses, taking into account specific safety, material and technical, socio-economic conditions.

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