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METHODOLOGY AND HISTORY OF PEDAGOGY МЕТОДОЛОГІЯ ТА ІСТОРІЯ ПЕДАГОГІКИ

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IMPLEMENTATION OF THE IDEAS OF THE UKRAINIAN MENTALITY IN THE EXPERIENCE OF THE OUTSTANDING EDUCATOR A. S. MAKARENKO

O. A. Dubaseniuk*, O. V. Antonov**

The article analyzes the pedagogical heritage of the outstanding educator A.S. Makarenko. It is noted that the assessment of pedagogical theory and practice of A.S. Makarenko covers the spectrum of opinions from the founder of "Gulag pedagogy" to the pioneer and brilliant inventor of modern humanistic pedagogy, from a talented self-taught practitioner to the outstanding theoretician who was ahead of his time and whose ideas are still waiting for deep study and implementation.

The main stages of the life and pedagogical activity of A.S. Makarenko are determined, the periods of his professional development as a teacher-creator and innovator are highlighted. The anticipatory innovative nature of pedagogical theory and practice of a talented teacher is noted.

It was concluded that in the experience and personality of A.S. Makarenko vividly reflects the fundamental ideas that characterize the personality and mentality of a Ukrainian: the desire for learning and self-education; the high moral qualities of a Ukrainian as a citizen are formed; the priority of labor education, which involves love for Ukraine, for the native land, the desire to work on the land, increase its potential, develop agriculture, animal husbandry; the importance of aesthetic education, love for various types of art, etc. It is noted that the possible reason for not adopting the pedagogical system of A.S. Makarenko's official Soviet pedagogy was saturated with the ideas of the Ukrainian mentality.

Keywords: the main stages of life, pedagogical heritage, mentality, Ukrainian mentality, innovative ideas.

^{*} Doctor of Sciences (Pedagogy), Professor

⁽Zhytomyr Ivan Franko State University)

dubasenyuk@ukr.net

ORCID: 0000-0002-9447-4527

^{**} Candidate of Philological Sciences (PhD in Philology), Associate Professor (Zhytomyr Ivan Franko State University)

dakalexusgtx3@gmail.com

ORCID: 0000-0002-6557-5548

УПРОВАДЖЕННЯ ІДЕЙ УКРАЇНСЬКОЇ МЕНТАЛЬНОСТІ У ДОСВІДІ ВИДАТНОГО ПЕДАГОГА А. С. МАКАРЕНКА

О. А. Дубасенюк, О. В. Антонов

У статті проаналізовано суперечливі позиції науковців щодо педагогічної спадщини видатного педагога А.С. Макаренка. Зазначено, що оцінка педагогічної теорії і практики А.С. Макаренка охоплює спектр думок від основоположника "педагогіки ГУЛАГУ", "підручного НКВД" до першовідкривача і геніального винахідника сучасної гуманістичної педагогіки, від талановитого самоука-практика до геніального теоретика, який випередив свій час й ідеї якого ще чекають свого глибокого вивчення і впровадження.

Визначено основні етапи життя і педагогічної діяльності видатного педагога відповідно до потреб сьогодення, виділено періоди його професійного становлення як педагога-творця і новатора. Зазначено випереджувальний інноваційний характер педагогічної теорії і практики талановитого педагога.

Зроблено висновок про те, що у досвіді та особистості А.С. Макаренка яскраво відображені основоположні ідеї, які характеризують особистість і менталітет українця: прагнення до навчання і самоосвіти; сформовані високі моральні якості українця як громадянина; пріоритет трудового виховання, що передбачає любов до України, до рідної землі, бажання працювати на землі, примножувати її потенціал, розвивати сільське господарство, тваринництво; значення естетичного виховання, любов до різних видів мистецтва тощо. Зазначено, що можливою причиною неприйняття педагогічної системи А.С. Макаренка офіційною радянською педагогікою була її насиченість саме ідеями української ментальності.

Ключові слова: А.С. Макаренко, основні етапи життя, педагогічна спадщина, менталітет, український менталітет, інноваційність ідей А.С. Макаренка.

Introduction of the issue. Years distance us from the life and work of an outstanding humanist educator, a great son of the Ukrainian people - Anton Semenovych Makarenko, whose determination and hard work helped many disadvantaged children to understand the meaning of life and successfully socialize. At the end of the century, last 100 pedagoguesphilosophers were named by the International Bureau of Education as part of UNESCO, forming the "Galaxy of Paidei", which reflects different cultures, civilizations, and eras. This space of culture is represented by the names of A.S. Makarenko, K.D. Ushinskvi and other educators.

Current state of the issue. Life and pedagogical activity of A.S. Makarenko became the subject of research by many domestic and foreign scientists, in particular M.D. Yarmachenko, I.A. Ziaziun, N.V. Abashkina, S.H. Karpenko, Gotza Hilliga, A. Levin, E. Mattini, and others. At the same time, the figure of A.S. Makarenko attracts the attention of a significant number of researchers who express ambiguous opinions regarding his work. The reasons views for different mav be the contradictory nature of historical eras, differences in ideological and political positions, ideological orientations of scientists, contradictions of emerging pedagogical phenomena; differences in authors' methodological approaches, ambiguous interpretation of terminology, etc.

the situation Analyzing around A.S. Makarenko, certain positions of scientists can be distinguished. Thus, some researchers emphasize the distorted formed clichés and stereotypes of the mass consciousness in relation to A.S. Makarenko Professor Thus, L. Holmes of the University of South Alabama noted: "At one time, I was seriously engaged in his system and even wrote a paper specifically devoted to this issue... I took up the work with full confidence that Makarenko was ล Stalinist. But everything turned out to be completely wrong. I like what he did. His approach to children is the approach of a wonderful teacher. And that's why I have deep respect for him and his methods." In the 1960s, Cornell University professor

Y. Bromfenbrenner concluded that "his theoretical concept surpasses everything contained in the world socialpsychological literature of the last three decades". Makarenko's models are highly praised by the Norwegian scientist A. Rolle, who emphasized that "Makarenko's genius is so great and his contributions to history are so vast that only the new generation will appreciate them".

The range of opinions about the pedagogical theory and practice of A.S. Makarenko includes the most diverse evaluations: from the founder of "Gulag pedagogy" to the pioneer and brilliant inventor of modern humanistic pedagogy, from a talented self-taught practitioner to a brilliant theoretician who was ahead of his time and whose ideas are still waiting for deep study and implementation.

the vears of During Ukraine's independence, the situation changed, as the existing Ukrainian mentality was under russian influence. Also, it should be noted that the culture of Ukrainian has long been developed mainly withing the paradigm of being an agricultural state. Thus, this fact determined the entire system of the worldview, cultural priorities, and social organization. The agricultural essence of the mentality of "...in Ukrainians is manifested а particularly developed cult of bread, in the deification of peasant work". The second type of mentality of Ukrainians the Cossack mentality - was formed in a different way and it's based on the idea of a free spirit and freedom (as opposed to attachment to the land and native place). The collision of two types of culture and types of mentality created two а contradiction between them, forming the most typical features of the national character of Ukrainians, such as an extremely high sense of the tragic and empathy for human suffering. The duality of mentality also affected the peculiarity of the organization of Ukrainian society. It primarily focused is on internal mechanisms self-organization: of brotherhoods, sisterhoods, communities, guilds, etc. [7].

Among the characteristic features of the Ukrainian mentality, researchers include democracy, desire for freedom, poetics, religious tolerance, openness in communication, and friendliness. Ukrainians are characterized by a deep respect for traditions, caution towards innovations, a desire for permanence, and an economic stability [8].

In the experience and personality of A.S. Makarenko, in our opinion, the fundamental ideas that characterize the personality and mentality of a Ukrainian are vividly reflected: his high intellectual potential; the desire for constant development and self-development, for learning and self-education; the high moral qualities of a Ukrainian as a citizen are formed; the priority of labor which involves love education. for Ukraine, for the native land, the desire to work on the land, to increase its potential, to develop agriculture; the importance of aesthetic education – singing, folk music (choirs, performances), love art for various types of art, making embroidery, paintings.

Makarenko had to refute the opinion of high Soviet pedagogical authorities (which he called "Olympus") that his pedagogy was non-Soviet, since he introduced military discipline in his institutions, as well as set the task of forming the concept of honor, competitions, etc. In 1928, A.S. Makarenko gave a long report on his pedagogical system. Representatives of the People's Commissariat of Education of Ukraine and the Research Institute of Pedagogy issued their verdict: "The proposed system of the educational process is not a Soviet system" despite Makarenko's best effort not only to save the lives of disadvantaged children, but also to develop such an educational system that helped each child become an individual, realize his natural potential, and become a true citizen of Ukraine.

The reason for not accepting the pedagogical system of A.S. Makarenko was due to multiple "non-Soviet ideas" of his pedagogical practice, which led to reprisal and censorship. Thus, there is an urgent need to rethink the pedagogical heritage of an outstanding Ukrainian

educator in the context of the ideas of the Ukrainian mentality and to select pedagogical methods and tools, since nowadays the problem of education of children and youth retain its relevance under new conditions. Unfortunately, the number of children with special educational needs, as well as children deprived of parental care and support, including so-called "Euro-orphans", remains considerable.

Aim of research is to analyze the main life stages and pedagogical legacy of A.S. Makarenko, in accordance with the ideas of the Ukrainian mentality, the urgency to highlight the periods of implementation of the outlined ideas.

Results and discussion. Even in his young years, A.S. Makarenko was already aiming for pedagogical work. He had excellent abilities, persistently mastered the basics of science, engaged in selfeducation. After Makarenko's family moved to the village of Kriukiv in the Poltava region, Anton Semenovych studied at the Kriukiv 4th-grade school, after which he continued his education at pedagogical courses in the same school. After their graduation in 1905, as a primary school teacher, he was sent to the Kriukiv two-class railway school, where he worked for 6 years. In 1911 Anton Semenovych was transferred to the Kherson Region to the Dolyna Railway School, where he continued to work as a primary school teacher. In 1914 he entered the Poltava Teachers' Institute at the Faculty of Philology. For some time, he served in the army, but due to his health demobilized in 1917 he was and continues to study at the Poltava Teacher's Institute, where he showed himself as a gifted versatile personality. Already a mature person, he dived into in self-education. scientific work. and writing. In June 1917 A.S. Makarenko graduated from the institute and received a gold medal for the pedagogical work of Modern Pedagogy". After "Crisis graduating from the institute, he worked as a teacher at a model school at the Poltava Pedagogical Institute. In September 1917 he was appointed the head of the Kriukiv Higher Primary

School, where he worked until 1919. During this period, Anton Semenovych paid great attention to the organization of the work and leisure of the children and staff: labor education teaching of children: club and group work of students; cultural and educational work among the population.

In Kriukov, A.S. Makarenko opened an evening school for railway workers where teaches history, language. he and literature. In 1919, he moved to Poltava and became the principal of an elementary school, and the head of a seven-year labor school. Then he was elected a member of the provincial teachers' union. Thus, the period of professional formation of the outstanding educator was quite fruitful. He proved himself not only as a talented teacher, but also as a leader and organizer of versatile educational and pedagogical work.

A.S. Makarenko wrote thatr after the revolution fate entrusted him with "the lowest division of humanity - the homeless, so he patiently trained them to work, as well as got them educated. Thus, Anton Semenovych made the most important decision in his life - he became a teacher, a father, a defender, and a all rolling into savior. one. for disadvantaged children, whom he also helped to find the meaning of their lives and gain viability. Scientists note that he helped them to regain the motivation to find their place in life. In other words, Makarenko's paradigm included the concept of "conscience" that he identified as "an organ of meaning". Thus, it can be defined as the ability to discover that single and unique meaning that is hidden in any situation. A.S. Makarenko felt his responsibility for the fate of these children and acted according to his conscience.

The first strategic line of his outlook was faith in pedagogy, its anticipatory function in personality development. He constantly emphasized that real pedagogy is fed by life itself. Speaking about the results of his work, he writes: "... it's not me who creates it and not a bunch of teachers, it's the whole atmosphere of life that creates this "miracle", educates every square of the earth. The unity of

education and life is a red thread that runs through all the pedagogical creativity of the teacher".

The period of acquisition and enrichment of Makarenko's pedagogical experience. The search for his own pedagogical paradigm in the context of the ideas of the Ukrainian mentality.

A.S. Makarenko attached great development importance to the of educational goals. He believed that each era and each generation define its goal of education in accordance with the requirements of the time. According to Makarenko, the goals of education consisted in the formation of a fighter, a patriot, a worker, a collectivist with a high sense of social responsibility and discipline. The educator substantiated the relationship between upbringing and knowledge of the child's personality, team personality, education and and upbringing. He proved the relationship between pedagogy and other sciences, revealed ways of harmonizing school, family and extracurricular education. Anton Semenovych devoted many years of his pedagogical activity to the problem of creating harmony of public and personal interest in the process of education, which is reflected in his pedagogical works. This harmony is the essence of education. He considered the upbringing of the individual in the team as a method common to all and which at the same time gives everyone the opportunity to develop. However, the meaning of humanistic education of A.S. Makarenko saw not in beautiful words and declarations, but in creating a situation of responsibility, everyday real work to organize favorable conditions for a healthy life, study, work, mastering a profession, spiritual growth, and physical development of a young approach, which person. Such an consisted in real care for children, their development, should be an example for the implementation of educational work in modern conditions by heads of educational institutions, organizers of public education, pedagogues, and teachers.

Makarenko's theory of the pedagogical team improved educational process in

most educational institutions. The model of the group (collective) of students proposed by Anton Semenovych laid the basis of joint activities and common goals and introduced a model of democracy within the community. Thus, he wrote in his diaries: "The collective of teachers and the collective of children are not two collectives, but one collective, and above all the pedagogical collective". High dynamism of collective life. close relationships between its members, open, democratic discussion of all issues at general meetings and in other bodies of student self-government gradually become a guarantee of healthy public opinion; periodic replacement of the asset, equal requirements for everyone and a mandatory work report to the team are manifestations of democracy.

It is clear that the specific forms of selfmanagement organization that existed in the institutions of A.S. Makarenko. cannot always be directly transferred to the practice of a modern school. However, spirit of discussion, the collective decision-making and conscious discipline, a favorable atmosphere that formed the feeling of a meaningful community life - all this should be carefully studied, upgraded, and implemented in modern educational practice. Discipline, according to A.S. Makarenko, is, first of all, not a means of education, but a result, and only then it becomes a means. Discipline is formed by respect for the team, enthusiasm for learning and work [4].

A.S. Makarenko developed new methods of upbringing children, proved the purposefulness and expediency of the applied pedagogical tools in accordance with social requirements. Thanks to his contribution to the theory of education, educational methods such were developed and introduced into the educational process: organization of teams, formation of public opinion, of combination respect with demandingness, creation of positive traditions, competition. use of Makarenko's idea of perspective lines as a method of collective and individual development has not lost its relevance in

modern conditions, as its author noted: "To educate a person means to educate prospective ways of achieving tomorrow's joy". In particular, the teacher emphasized the importance of games as a method of education and upbringing: "It is necessary to meet the constant desire of children to play".

We can also see Makarenko's contribution to the development of education methods in the fact that he not only outlined the directions of the educator's activities, but also showed how it should be done: "Raising children is an easy task when it is done without nerves, on the basis of a healthy, calm, a normal, intellectual and cheerful life" A.S. Makarenko also contributed to the development of modern pedagogical science The ideas of Anton Semenovych are studied and spread all over the world. He paid a lot of attention to the physical and aesthetic education of children and youth. His first priority was the task of raising a healthy generation, thus in the commune every day began with morning exercise in the fresh air, regardless of the weather. Colonists loved different kinds of sports, including skiing, skating, football, tennis, etc. Each commune member had to hand in the norms of the special badges; classes were held in sports and artistic gymnastics, acrobatics. Anton Semenovych considered the game to be the most effective means of physical education, so he himself directed the work on the development and implementation games, which were constantly of changing. Great importance was attached to tourist trips. Community members traveled around Crimea, the Caucasus, Volga, which contributed along to strengthening the health and physical development of pupils.

Physical education was naturally combined with aesthetic education. This was manifested primarily in elements of militarization and symbolism (signals, reports, etc.), in ritual events and actions. A powerful means of aesthetic education was the choir, orchestra, theater, cinema, club work, reading fiction, studying fine arts, aesthetic decoration of the commune (a large number of flowers both in the premises and on the entire territory of the colony and commune). The commune had a hectare of a beautiful flower garden, the best greenhouse in Kharkiv. The holiday of the first sheaf and the labor festivity were held in the colony with great aesthetic taste.

Aesthetic education. Makarenko himself was a multi-talented person: he played the violin, drew pictures, was a talented director and actor, wrote scripts and plays for the commemorative events. He also took care of the aesthetic education of his pupils. As an erudite and intelligent person, Makarenko was a great conversationalist. He included the beauty of clothes. language, movements. everyday life, work, and recreation in the program of aesthetic education, for he simplicity, highly valued artistic naturalness, sense of proportion, as well he could not tolerate rudeness, as tactlessness, laxity, showing off in work, movements, conversation, and actions. Makarenko constantly tried to ensure the unity of the inner and outer beauty of a person, ethics and aesthetics. Grinding the emotional and volitional sphere formed in the students' good aesthetic tastes and high human ideals, to which they aspired not only during their stay in the commune or colony, but also throughout their lives.

Overcoming Labor education. difficulties. enormous Anton Semenovych, together with his pedagogic team, achieved significant success in the work of the labor colony: the premises of the former orphanage in the village were rebuilt in Kovalivtsi (near Poltava) with its economic potential fully restored, including: workshops (tailoring, carpentry, forge), pig cattle farms. The facilities also housed horses and the farm equipment for cultivating the land. The management of the colony was carried out on the basis of the self-government of the Council of Commanders, the element of military affairs was introduced into the life of the colonists. Well-organized work was the main means of re-education and upbringing of the colonists. Once again, a well-thought-out and organized system of joint squads, often of different ages, was

implemented. A powerful, efficient, and creative team of pupils and teachers was formed.

Despite great successes in the field of education of children and youth, It was difficult for Makarenko to work because not everyone recognized his pedagogical system and some teachers considered it anti-Soviet. However, when certain difficulties arose in the labor colony (there was not enough land, low-productivity artisanal farming, the absence of any industrial enterprise around, difficulties finding work for the colonists), in Makarenko, together with the colonists, decided to transfer the colony (120 pupils) to Kuriazh (near Kharkov) in 1926, assimilating local population of 280 new pupils in a very neglected state. It was a huge risk due too large number of mostly uneducated hostile local children with criminal record, however. vast he managed to accomplish the unification of his labor colony with Kuriazk ("Conquest of Kuriazh") brilliantly, using so-called "explosion method".

Nevertheless, in the summer of 1928, A.S. Makarenko was summoned to the board of the National Committee Service with a report. The evaluation of the work of the colony was identified as negative, the pedagogical activities and of A.S. Makarenko were proclaimed "noncommunist" and "anti-Soviet". However, the chekists came to the teacher's defense and offered him to be the head of the Kharkov commune, where A.S. Makarenko worked for 7 years from 1928 to 1935. He paid special attention to improving the general, polytechnic, and professional education of the communes, preparing them for life and work. The labor commune had a ten-year secondary school, well-equipped workshops, and two factories producing cameras and electric drills. Various selectives and studios worked in the commune, a multicirculation newspaper was published.

Mental education. A.S. Makarenko, together with a team of educators, managed to combine theoretical studies with physical activities. Pupils received secondary education, despite large gaps in knowledge. There was a library in the

colony, and the children were involved in collecting the books. Community members combined education with productive work at factories (older pupils). At enterprises, pupils worked for 5 hours and studied for 5 hours as well. Many graduates of the commune studied at universities and technical schools. worked at plants and factories in Kharkiv, and served in the army and navy. Makarenko described the life of the commune in the book "Flags on Towers" (published in 1938). Both in the colony and in the commune, well-organized work, which was pedagogically directed, was the main means of education and reeducation. Much attention was paid to self-government and management, which was carried out by the Council of Commanders., but the highest legal body was the General Assembly. The system of combined squads was widely used in work.

Discipline and organization. Makarenko used the militarization, excursion-tourist trips, and military-sports games to achieve positive results. Pupils loved and respected him as a leader and vivid personality. In 1935, he left his job in the Dzerzhinskyi commune and moved to Kyiv, where he worked as the deputy chief of labor colonies of the NKVD of Ukraine and headed the labor colony in Brovary.

Conclusions and research perspectives. The books of A.S. Makarenko contain valuable observations on the peculiarities of human characters and the process of finding the meaning of life for teenagers who have lost it. Thanks to his contribution, Makarenko was accepted into the Union of Writers, and in 1937 the "Book for Parents" was published. He also gave a series of lectures on the radio and in front of the public, met with teachers students, Unfortunately, and etc. A.S. Makarenko died prematurely. He still had many unrealized ideas. During his life and in the first years after his death, he was not recognized among the broad circles of intellectuals and educators, although he left a rich pedagogical legacy based on significant real-life experience. He wrote more than 150 works (novels,

short stories, plays, screenplays, nonfiction articles, etc.). Peoples honor his memory and highly value his pedagogical legacy. According to the Italian researcher E. Mattini, one of the founders of the Italian Makarenko Association, updating the educational experience of the past means looking at it from a perspective. In other words, if the pedagogical community wants to confront complex modern pedagogical, educational, social problems with the help of an outstanding reformer of the past, it is obliged to understand the essence of his experience, avoiding silent formalism.

One of the most prominent innovators in the field of pedagogy, A.S. Makarenko created and scientifically substantiated a holistic system of education based on the traditions of the Ukrainian people. The outstanding educator emphasized: "... it is necessary to build the surrounding world in such a way that a person in it learns and assimilates everything human and is a real person".

REFERENCES (TRANSLATED & TRANSLITERATED)

1. Ziaziun, I.A., Kryvonos, I.F., & Tarasevych, N.N. (1998). Humanistychna sutnist maisternosti A. Makarenka-vykhovatelia [The humanistic essence of A. Makarenkos skills as an educator]. *Pedahohika i psykholohiya – Pedagogy and psychology*, № 1, 18-43 [in Ukrainian].

2. Karpenchuk, S.H. (2003). Pedahohichna tekhnolohiia A.S. Makarenka v konteksti suchasnoi pedahohiky [Pedagogical technology of A.S. Makarenko in the context of modern pedagogy]. *Extended abstract of Doctor*'s *thesis*. Kyiv: Instytut pedahohiky APN Ukrainy, 40 [in Ukrainian].

3. Mettini, E. Pedahohichni idei A.S. Makarenka y zakhidno-yevropeiska naukova dumka [Pedagogical ideas of A.S. Makarenko and Western European scientific thought]. Retrieved from: http://www.makarenko.it/makarenko_italia.htm [in Ukrainian].

4. Khyllyh, H., & Oksa, N.N. (2003). K istorii vozniknoveniia kolonii im. M. Horkoho [To the history of the emergence of the M. Gorky colony]. *Kultura narodov Prychernomoria* – *Culture of the peoples of the Black Sea region*, № 38, 87-93 [in Ukrainian].

5. Yarmachenko, M.D. (1999). A.S. Makarenko – vydatnyi pedahohichnyi reformator [Makarenko is an outstanding pedagogical reformer]. *Pedahohichni idei A.S. Makarenka i suchasnist: problemy ta perspektyvy – Pedagogical ideas of A.S. Makarenko and modernity: problems and prospects.* Pereiaslav-Khmelnytskyi, 265-268 [in Ukrainian].

6. Yarmachenko, M.D. (1988). A. Makarenko i svitova pedahohika XX st. [A. Makarenko and world pedagogy of the 20th century]. *Pedahohika i psykholohiia* – *Pedagogy and psychology*, N_{0} 1(18), 5-12 [in Ukrainian].

7. Dva typy ukrainskoi mentalnosti: selianskyi ta kozatskyi [Two types of Ukrainian mentality: peasant and Cossack]. Retrieved from: https://mamajeva-sloboda.ua/publ/dva-typy-ukrayinskoyi-mentalnosti-selyanskyi-ta-kozatskyi/ [in Ukrainian]

8. Istoriia ukrainskoi kultury. Navchalnyi posibnyk [History of Ukrainian culture. Tutorial]. Retrieved from: https://cutt.ly/nFkU0HT [in Ukrainian].

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