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Health Maintenance of Person: Experience of Waldorf School

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Abstract

The problem of formation of healthy young generation requires analysis of theory and practice of schools which aim at children's health maintenance. The article is dedicated to generalization of world and Ukrainian experience of activity of Waldorf schools that practically solve the problem of ensuring healthy spiritual-mental-physical development of person. For conducting the research, the theoretical methods (analysis, synthesis, systematization, generalization) and empirical methods (observation, assessment, methods of psychological-pedagogical diagnostics) have been used. The results of the study have shown that pupils' health maintenance is carried out due to using health potential of pedagogical means. In pupils have better indicators of physical and mental health. Waldorf school pupils have well-developed qualities of perception of information, mathematical and other abilities. Waldorf school has positive influence on development of such qualities as individual initiative, creativity, independence of decisions, ability to work with people and social mobility. There are almost no unemployed people and people with asocial behaviour among Waldorf school graduates; they work in social sphere, education, medicine etc. So, solving the problem of pupils' health maintenance requires comprehension and creative use of comparison with pupils of traditional schools, Waldorf school theory and experience in pupils' health support. Then, a sentence must be mentioned regarding the implications of the study.

Keywords: Waldorf school, Traditional school, Health maintenance, Person, Experience

1. Introduction

Formation of healthy generation, person's conscious attitude to his health and other people's health is one of the priorities of schools nowadays. However, we should note that school education does not realize its health maintaining function fully. For instance, according to statistic data, more than 80% of schoolchildren suffer from chronic diseases. It is caused by unfavourable social-economic, ecological and hereditary factors. At the same time, didactogenous factors are also among risk factors. These didactogenous factors are: imperfect organization of educational process, informational overload, problems in interaction between teacher and schoolchildren, prevalence of reproductive nature of teaching etc.

In educational practice the problem of schoolchildren's health maintenance is solved mainly due to implementation of medical and hygienic measures, but health maintaining potential of pedagogical means and approaches remains incompletely implemented.

Scientific substantiated solution to the problem of formation of schoolchildren's health due to education encourages scientists to make a thorough analysis of the theory and practice of schools that are aimed at schoolchildren's health maintenance.

One of the examples of such a school is Waldorf school. It practically solves the problem of ensuring person's healthy physical-mental-spiritual development and it organizes educational process on the basis of child's healthcare and health maintenance. It is proved by the results of the researches carried out over the past ten years both in Ukraine and Russia and western countries where Waldorf pedagogy has a long tradition.

2. Literature Review

The analysis of publications and researches proves that philosophic, psychological-pedagogical bases



of Waldorf pedagogy were substantiated, first of all, in scientific heritage of a founder of Waldorf school – Rudolf Steiner (1861-1925), a famous European thinker, scientist, pedagogue. The theoretical foundations of Waldorf pedagogy were also revealed by modern scientists, in particular H. Bartz and D. Randoll [1], O. Ionona [2], A. Pinskyi [3] and other scientists. Moreover, modern researchers study both theoretical basis and practical aspects of Waldorf education. For instance, O. Ionova [4] analyzed Waldorf school experience in the context of Ukrainian national pedagogical theory and practice; S. Luparenko [5] studied the peculiarities of development of junior pupils' cognitive activity by means of Waldorf pedagogy; O. Lukashenko [6] investigated the use of Waldorf school achievements for maintaining health in young learners; V. Partola [7] analyzed the specific features of formation of intellectual skills of junior pupils in the learning process of Waldorf school.

The aim of the article is to analyze world and Ukrainian experience of activity of Waldorf schools that practically solve the problem of ensuring healthy spiritual-mental-physical development of person.

3. Method

A complex of methods was used to carry out this research. They were theoretical and empirical methods. The theoretical methods were analysis, synthesis, systematization and generalization for studying scientific-pedagogical sources, periodicals and statistic data concerning organization of the process of personal health maintenance at Waldorf school. The empirical methods were methods of pedagogical observation, assessment for the analysis of Waldorf schoolchildren's health; methods of psychological-pedagogical diagnostics for comparing the levels of development of schoolchildren at Waldorf and traditional schools (questionnaire for determining the formation of motivational sphere; "Anesthetic scale" by J. Kondash; self-esteem test by S. Budassi; A. Lurii's technique for identifying the ability of short-term memorization; J. Buck's technique "House-Tree-Man" to study personality traits; techniques "Picture by the fairy tale" and "Unknown animal" for diagnosing the mental states of personality; technique "Classification of stories in pictures" for identifying the level of formation of logical thinking, creative fantasy and ability to distribute attention; Horn's test of creativity imagination; Kern-Jiráskův test for determining the level of development of graphic skills, attention, motor skills and sensomotrics).

4. Results

World Studies of Waldorf Schools

The study "School and Health" was conducted by universities in Bielefeld and Helsinki (Finland) in 1990s in order to determine the influence of school learning on children's psychosomatic health. Several thousand schoolchildren of Waldorf schools and traditional schools were examined. It has been found that percentage of children who have mental illnesses at Waldorf schools is lower than at traditional schools. At the same time, this percentage has tendency to decrease at Waldorf schools while at traditional schools it has tendency to grow. The same thing is about children's physical health disorders, in particular frequency of headaches, disorders of the digestive system etc.

The level of interpersonal communication of Waldorf schoolchildren is high enough. Children like to learn, have more responsible attitude to what happens in the classroom; the level of their discipline and self-organization is higher. Incidents of violence among children happen at Waldorf schools less often than at traditional schools [2].

Quite large-scale comparative studies of schoolchildren's health were carried out during 2006. 6630 schoolchildren aged 6 to 13 years (4606 Waldorf schoolchildren and 2024 pupils of other schools) from five Western European countries (Austria, Holland, Germany, Switzerland and Sweden) took part in the studies. The researchers were particularly interested in detection of various types of infection and allergy which are quite common among children nowadays.

The conducted studies have shown that Waldorf schoolchildren have better health indicators than pupils of traditional schools. For instance, Waldorf schoolchildren suffer from pollinosis and eczema 20-30% less often and from allergy 32-39% less often than pupils of traditional schools [8].

Büssing, Ostermann, Jacobi, Matthiessen [9] have found out that in adulthood Waldorf school leavers suffer from allergy, arthrose, hypertension and other diseases less often than in Germany in the whole



(according to the data of Robert Koch Institute). Former Waldorf schoolchildren have ability to withstand significant loads, life difficulties and crises [1].

In order to determine possible reasons for these results, scientists observed children's lifestyle in their families. The obtained data showed that 40% of Waldorf schoolchildren had never used antibiotics and 43% of Waldorf schoolchildren had never used antipyretics (paracetamol, in particular), while respectively only 15% and 8% of pupils of traditional schools had never used antibiotics and antipyretics. Only a quarter of Waldorf schoolchildren were vaccinated against childhood diseases such as measles, rubella and mumps, while three fourths of pupils of traditional schools were vaccinated. One third of Waldorf schoolchildren had measles in comparison with one tenth of pupils of traditional schools. There was also rather significant difference in children's nutrition: three fourths of Waldorf schoolchildren eat organic, environmentally "clean" products (in comparison with one fourth of schoolchildren of traditional schools) [10].

The scientists concluded that anthroposophic understanding of a man was justified. According to it, infectious diseases, "childhood diseases" in particular, promote the construction of a strong immune system. That is why Waldorf schoolchildren's parents have restrained attitude to vaccination in order not to take away opportunities to strengthen children's health due to childhood diseases. Also, parents seldom give antibiotics and antipyretics to their children. Moreover, child's ecological nutrition, which is of particular importance at Waldorf schools, maintains child's vitality.

The achievements of Waldorf pedagogy are also confirmed by international independent comparative pedagogical researches which identify the quality of schoolchildren's achievements in different countries of the world. These researches are TIMSS (study of natural and mathematical education), PISA (study of reading and comprehension of texts) and numerous researches carried out by independent experts in the countries where Waldorf schools have already existed for many years (Denmark, Finland, Sweden, Switzerland and Germany) [2; 11; 12; 13].

For example, V.Hiller (Association of Waldorf Schools in Germany) emphasizes that these studies generally confirmed the correctness of the Waldorf approaches: a number of Waldorf principles were similar to those which are the basis for construction of the education system in the countries that showed the best results of schoolchildren's academic achievements. For instance, schoolchildren study in the same class for 9 years in Scandinavian countries and for 8 years in Sweden and Norway; teachers do not put marks to schoolchildren up to the seventh grade in Denmark. As V.Hiller asserts, children's later differentiation on academic achievements is a secret of success of Scandinavian countries as well as Waldorf school [14].

According to the statistic data, quite a large percentage of Waldorf school leavers enters universities. For example, in Germany, the number of Waldorf school leavers-entrants who successfully passed the abitur (state exams that give right to enter universities) is 20-30% more than the national average (such statistics has remained stable for decades) [12; 14]. It means that the number of pupils who can enter universities is more at Waldorf schools, where children study for 12 years on non-selective basis, than at traditional schools which one way or another carry out the selection of pupils. It should be noted that abitur at Waldorf school is taken according to state requirements and under strict control of state educational institutions.

The statistic data on professional orientation of Waldorf school leavers are collected by departments of education and science in different countries and show certain success of Waldorf education.

For instance, German Waldorf school leavers are thoroughly investigated in the work of Barz and Randoll [1]. During 2003-2005, they studied 1124 former Waldorf schoolchildren who left school from 1939 to 1974 [1]. The scientists conventionally divided Waldorf school leavers into three groups. The schoolchildren of the first group (31%) are called „culturally-oriented“ and have cultural and educational priorities (visiting museums and theatres, reading etc.). At the same time, they are most interested in anthroposophy: 22% of them considered themselves to be active anthroposophists. We would like to note that this number of anthroposophically-oriented former Waldorf schoolchildren does not confirm the opinion that „Waldorf school brings up anthroposophists“, as such an opinion exists among pedagogical community. The schoolchildren of the second group (33%) are called „relationship oriented“. Interpersonal, emotional communication with people and „life for others“ are of great importance for such people. They like practical-applied activities and try to do everything with their own hands. The schoolchildren of the third group (36%) are called hedonists, and they are interested in sports, entertainments, physical comfort and enjoyment of life.



It has been found that regardless of selected types, the majority of former Waldorf schoolchildren are able to treat things and phenomena of the environment critically and consider them in all encompassing relations. The criterion of social responsibility is a priority for the overwhelming number of Waldorf school leavers. Barz and Randoll [1] explain it by social orientation of Waldorf school, its joint holidays, concerts, performances, due to which pupils can experience strong feelings of community with people who are around them.

Up to 92% of former Waldorf schoolchildren emphasize that they liked studying at school. They identify themselves with the former educational institution, evaluate schooling positively and especially distinguish cultural-artistic and practical-craft cycles. Waldorf school leavers are convinced that the school gave them an opportunity to get good basic education, acquire such key competences as positive attitude to life, fundamental confidence in own strength, independence and ability to adapt to living conditions [1].

Similar data were obtained during the written survey of 1586 Swiss Waldorf school leavers who left schools within 1990-1996. The survey was carried out by Swiss Independent Institute in Kilchberg in 1999. The results of the survey allowed to conclude that Waldorf education promotes formation of qualities that are highly relevant for the modern world, namely: independence, ability to interact in a group, creativity, integrated (holistic) thinking [15].

Having asked former Waldorf school leavers how they assess their chances in the labour market in comparison with pupils from traditional schools, the researchers got following results: 70% of former Waldorf school leavers assessed their chances as equally good, 16% of them thought that they are rather better than worse, 8% of them thought that they were better, 3% of former Waldorf school leavers thought that they are rather worse than better and 2.5% of them thought that they were worse. 90% of respondents gave an affirmative answer to the question of whether they have professional and personal goals for the next 3-5 years and described them clearly. The vast majority of the young people considered graduation and promotion in the professional sphere to be their immediate goal [15].

Different studies of former Waldorf schoolchildren note that up to 75-85% of them are satisfied with their profession. According to the results of the survey [15], we can conclude that most Waldorf school leavers managed to make a good choice of profession and develop professional perspectives. Positive assessment of own chances in the labour market is explained by personality strength and indicates a high level of self-confidence. The assessment of own abilities and professionalism was high as well. The school leavers evaluated the school positively and noted that first of all it brought up creativity, abilities to communicate, analyze and to make independent decisions.

So, it is not surprisingly that according to UNESCO, there are almost no unemployed among Waldorf school leavers (and the same thing is observed in the countries where the number of unemployed is constantly increasing), as well as there are almost no criminals, drug addicts, alcoholics [4; 16].

Equally important is the fact that Waldorf school leavers aspire to further education: according to the data of Barz and Randoll [1], 46.8% of Waldorf school leavers received academic education, 68.7% of them graduated from institutes or higher specialized schools.

Waldorf school leavers also show the aspiration to engage in social professions. For example, according to the statistic data obtained in Germany (Results, 1995), 28% of Waldorf school leavers work in education and social sphere. Moreover, 14.6% of them chose teaching profession, which occurs 5 times more often in comparison with other people [1], 12% of Waldorf school leavers chose work in medicine, 12% of them chose work in art and linguistics.

From the whole variety of professions, social sphere (education, medicine, social therapy etc.) is also chosen by Waldorf school leavers in other counties, in Switzerland in particular [15]. A high percentage of those who choose social sphere proves that social and altruistic motives are of great importance for former Waldorf schoolchildren in vocational guidance. However, it is only statistics. In real life, former Waldorf schoolchildren can be met in various spheres of social life where they work proactively and are ready to take responsibility.

For instance, L. Gessler's "Educational success in the light of educational biographies" [17], published by The European Community, was a real sensation in European pedagogical thought. The author analyzes Waldorf educational process and biographies of Waldorf school leavers in detail. According to the results of L. Gessler's work, a lot of famous people were among Waldorf school leavers. They were Andreas Karlgren



(a politician and member of Parliament of Sweden), doctor Olaf Feldmann (a member of German Federal Parliament), Carl Otto Pole (President of German Federal Bank in 1980-1991), Jens Stoltenberg (former Prime Minister of Norway, a leader of the Labour Party nowadays), Ken Chenault (Chairman of American Express; in 2002 he was recognized as the second most influential manager in the USA), Michael Ende (world-famous writer and author of bestsellers of children's German-language literature), Ferdinand Alexander Porsche (in 1963 he created Porsche 911 which is considered as cult-car, car-dream, design miracle and "king of sports cars") and many others.

As schools are usually chosen by parents, not children, we should note famous parents of Waldorf school leavers, i.e. people who chose Waldorf school for education of their children.

Thus, a lot of children of famous parents studied at Waldorf school. They are: daughter of Silvio Berlusconi (Prime Minister of Italy), daughter of Mikhail Baryshnikov (American dancer and actor), son of Jean Paul Belmondo (French actor), daughters of Wolfgang Clement (Minister of Economic Affairs in Germany), daughter and granddaughter of Rudolf Leiding (former speaker of the board of directors of Volkswagen, Germany), children of Jonas Gahr Store (Secretary General of the Norwegian Red Cross, former Executive Director of the World Health Organization), children of Harrison Ford (famous American actor), children of John Paul Jones (musician in Led Zeppelin, the UK), son of Helmut Kohl (former Chancellor of Germany) and many others.

As Barz and Randoll [1] note, 20% of parents choose Waldorf school for their children because they are not satisfied with public school, and 11% of them choose Waldorf school because they consciously give preference to anthroposophically-oriented education. At the same time, most parents consider an attractive Waldorf pedagogical concept (individual assistance in personal development, absence of mark evaluation, artistic and practical orientation of education etc.) to be the main motive for choosing a Waldorf school for their children.

Studies of Waldorf Schools in Russia

In recent years, studies of Waldorf pedagogy began to appear in the countries of the former USSR. For example, in Russia in 2000, psychologists of Moscow State University named after M. Lomonosov (under the direction of N. Yevsykova) studied the dynamics of mental development of children of Russian Waldorf institutions. It has been found that children at Waldorf institutions are not far behind in intellectual development and their development by some indicators (memory, in particular) is better than other children's development, despite the absence of special intellectual training and great educational load. In 2002, the scientists of Psychological Institute of Russian Academy of Education (under the direction of Ye. Smirnova) carried out the comparative studies of children's moral education at Russian Waldorf and traditional nursery schools and received convincing results in favour of Waldorf nursery schools [2; 4; 18].

Since 2000, first children began to leave Waldorf schools. In particular, 53 pupils left Moscow Waldorf school No. 1060 during ten years of its work (as for 2002). These Waldorf school leavers entered prestigious Moscow universities: 14 Waldorf school leavers entered humanitarian universities, 12 school leavers chose social-economic universities, 12 school leavers entered technical and natural science universities and 10 Waldorf school leavers entered artistic and musical universities. The survey of former Waldorf schoolchildren has showed that they are happy and pleased to recall their school that helped them to determine life prospects, formed their abilities to communicate, act and think independently.

Studies of Waldorf Schools in Ukraine

In Ukraine, the first study dedicated to checking the effectiveness of organization of schoolchildren's education according to principles of Waldorf pedagogy was carried out by O. Ionova [4] in the second half of the 1990's.

It has been found that Waldorf approaches contribute to the humanization of the learning environment, realization of educational orientation on child's individuality in the conditions of group and mass work, constant formation of child's thinking, memory, fantasy, culture of feelings and will power and thus they ensure the success of the pedagogical process. It should be noted that Waldorf schoolchildren have basically the same educational level as other schoolchildren have. However, Waldorf schoolchildren have much higher level of their personal abilities (communicativeness, love for the beautiful, hard work, curiosity,



discipline etc.) and creative abilities (independence in educational-cognitive activity, development of cognitive interest).

In recent years, within the experiment "Development of Waldorf pedagogy in Ukraine" (Order of the Ministry of Education and Science No. 363, dated May 6, 2001), a number of psychological-pedagogical studies, aimed at comparison of educational results of schoolchildren of Waldorf and traditional schools, have been carried out. The basic educational institutions of the experiment are following Waldorf schools: "Stupeni" (Odesa), "Sofia" (Kyiv), "School of free child's development" (Dnipro), school No. 108 (Kryvyi Rig), educational complex No. 17 (Zhytomyr), educational complex "Buzkove hnizdo" (Gorodenky, Ivano-Frankivsk Region), educational complex "School of free development" (Kharkiv).

During the study, comparative check of knowledge of pupils at Waldorf and traditional schools were performed. The results of state attestations show that Waldorf schoolchildren's progress is higher than other schoolchildren's progress. In particular, according to the data of state attestations in Kryvyi Rig in 2002-2003 academic year, 100% of 4th grade pupils of Waldorf school were doing well at native language (the Russian language) and Mathematics and 92.8% of them were doing well at the Ukrainian language. As for traditional schools, 81.8% of 4th grade pupils were doing well in native language, 96% of 4th grade pupils were doing well in Mathematics and 92.8% of them were doing well in the Ukrainian language.

The studies of formation of knowledge of primary school graduates and other schoolchildren who took part in the experiment have shown that Ukrainian Waldorf schoolchildren after four-year learning acquire knowledge at a level not below the level of knowledge of pupils at traditional schools.

Evaluating it as an undeniable positive moment of Waldorf schoolchildren's learning, we should note that Waldorf education also aims at formation of children's abilities. The results of the research carried out in the educational complex "School of free development" (Kharkiv) prove it. This research was carried out under the comparative International Project on Mathematical Attainment (IPMA). It was introduced by University of Exeter (the UK) and aimed at both comparison of progress of mathematical education and revelation of effectiveness of the process of teaching Mathematics on the basis of early monitoring of development of schoolchildren's thinking and formation of their mathematical abilities. Relevant studies were conducted by a group of independent experts, using tasks same for all schoolchildren of certain age.

Nine schools took part in this project in Kharkiv. Based on the results of first checking in 2000-2001 academic year, 1st grade pupils of the educational complex "School of free development" took the fifth place by rating among pupils of others schools that took part in the project. In three years, in 2003-2003 academic year, these children, being 3rd grade pupils, took the first place by rating. They demonstrated well-developed verbal-logical and spatial thinking, understanding and ability to use mathematical knowledge and skills creatively.

5. Discussion and Conclusion

Different comparative psychological-pedagogical researches of development of schoolchildren at Waldorf and traditional schools were carried out during the experiment. The obtained results give reason to assert that Waldorf schoolchildren differ from other schoolchildren.

The first point is that Waldorf schoolchildren have higher level of development of motivational and emotional spheres. It is characterized by the fact that they like to learn and go to school with great pleasure, have positive informal attitude to school and teachers, stable cognitive interest. Besides, they are oriented on independent gaining of new knowledge.

The second point is that Waldorf schoolchildren have good memory, creative imagination and concentrated attention. Moreover, at the end of the academic year, the level of their attention increases (unlike the attention of pupils at traditional schools) and the level of aggression and anxiety decreases. It shows children's good adaptation to school and emotional stability.

As for the level of development of graphic skills, motor skills and sensomotrics, Waldorf schoolchildren differ slightly from other schoolchildren.

As for the level of development of logical thinking (ability to classify and establish the sequence of events, in particular), Waldorf schoolchildren almost do not differ from pupils of traditional schools. They have slightly worse indicators of criticality of perception and ability to generalize. However, Waldorf



schoolchildren are far ahead in the level of development of verbal-logical, spatial and creative thinking (they do creative tasks better).

Furthermore, Waldorf schoolchildren feel active and free at school, have well-developed empathy and sociality.

Finally, Waldorf schoolchildren know their body well and have good command of it. According to the results of medical examinations, they seldom miss classes because of illnesses in the period of avitaminosis and colds.

So, in comparison with traditional schools, children's study at Waldorf school has positive influence on their intellectual activity, individual initiative, creativity, independence of decisions, mental stability, social competence, coordination of body and movements, and therefore it contributes to child's healthy development.

The generalization of the above analysis gives reason to conclude that some scientists' ideas about Waldorf school as "art school" or "labour school" or a school suitable for sick children did not receive confirmation, as well as the ideas about Waldorf school as an educational institution where "there is good atmosphere but children do not learn anything" and where quality of knowledge is of secondary importance [19].

Furthermore, untrue is the statement that particular practice of Waldorf school leads to formation of pupils' sense of self-exclusivity and emergence of child's certain complexes, situational and personal anxiety [20].

However, it should be noted that the conducted research confirms the conclusions of the scientists [4; 5; 14; 17] about the essence of pedagogical process at Waldorf school as a means of person's holistic harmonious development.

So, we may conclude that Waldorf school theoretical principles and experience in pupils' health maintenance should be creatively comprehended and implemented in modern school for solving the task of formation of healthy young generation.

Conflict of interests

The author declares that there is no conflict of interests.

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