



International Journal of Applied Exercise Physiology

2322-3537 www.ijaep.com

Vol.9 No.12

Doi: 10.26655/IJAEP.2020.12.1

International Journal of Applied Exercise Physiology (IJAEP)

ISSN: 2322 - 3537

www.ijaep.com

info@ijaep.com

Editorial Board:

Arnold Nelson, PhD, Louisiana State University, USA

Chin, Eva R, PhD, University of Maryland, USA

Hornsby, Guyton W, PhD, West Virginia University, USA

J. Bryan Mann, PhD, University of Missouri, USA

Michel Ladouceur, PhD, Dalhousie University, Canada

MN Somchit, PhD, University Putra, Malaysia

Stephen E Alway, PhD, West Virginia University, USA

Guy Gregory Haff, Ph.D, Edith Cowan University, Australia

Monèm Jemni, PhD, Cambridge University, UK

Steve Ball, PhD, University of Missouri, USA

Zsolt Murlasits, Ph.D., CSCS, Qatar University

Ashril Yusof, Ph.D., University of Malaya

Abdul Rashid Aziz, Ph.D., Sports Science Centre, Singapore Sports Institute

Georgiy Polevoy, Ph.D, Vyatka State University, Russia



Eurasian Exercise and Sport Science Association

Abstracting/Indexing

[ISI Master List](#)

Web of Science Core Collection (Emerging Sources Citation Index) by Thomson Reuters

DOI (form Vol. 6(3) and after)

[ProQuest Central](#)

[NLM \(Pubmed\)](#)

[DOAJ](#)

[COPERNICUS Master List 2017](#)

[PKP-PN, \(LOCKSS & CLOCKSS\)](#)

[GS](#)

[Crossref](#)

[WorldCat](#)

[Journal TOCs](#)



Project Learning as a Means of Development of Schoolchildren's Cognitive Activity in Waldorf School

 Tetiana Dovzhenko¹,  Olena Ionova²,  Svitlana Kirychenko³ and  Svitlana Luparenko⁴

^{1,2,4}Doctor of Pedagogical Sciences, H. S. Skovoroda Kharkiv National Pedagogical University, Ukraine

³PhD in Pedagogy, Kharkiv Lyceum 89, Ukraine

Abstract

The article depicts the problem of project learning (types of projects, specific features and results of project learning) in Waldorf school as one of the schools, which are aimed at formation of creative, active, initiative and independent person who is able and willing to learn lifelong. The purpose of this article is to reveal project learning as a means of development of schoolchildren's cognitive activity in Waldorf school. A complex of methods has been used for this study, namely: theoretical methods (analysis and synthesis of scientific, educational and methodical literature for comparison of different views on the researched problem, definition of conceptual and categorical apparatus) and empirical methods (questionnaire, survey, observation, conversation, dialogue, study of the results of educational activities of schoolchildren to identify the level of development of their cognitive activity). The aim of project learning in Waldorf school is to form various general and special skills and abilities. The tasks of project learning in Waldorf school are: to create preconditions for the mental development of schoolchildren; to form basic habits; to strengthen schoolchildren's will and confidence in their abilities; to develop schoolchildren's independence in learning; to promote the development of creative abilities and imagination of schoolchildren; to awaken schoolchildren's active interest in learning and a sense of responsibility; to maintain schoolchildren's desire and create the conditions for lifelong learning; to develop communication skills, etc. Project learning in Waldorf school involves keeping schoolchildren's workbooks "by epoch", conducting schoolchildren's own research on various topics (often socially significant) and creation of game situations in the study of theoretical subjects and playing life situations. Project learning in Waldorf school enables schoolchildren to test themselves in various activities and contributes to the formation of practical skills, development of individuality, hard working, purposefulness and initiative, attention, memory and will.

Keywords: Project learning, Active-practical projects, Schoolchildren, Waldorf school, Cognitive activity, Workbooks.

1. Introduction

The formation of a person who is able to work effectively and learn lifelong is one of the priority tasks of modern educational system. Person's cognitive activity, his attitude to acquisition of knowledge and motives of cognitive activity are the most important condition and at the same time an indicator of the success of the process of forming an active, initiative and independent person who is willing and able to learn and strives for constant and active accumulation of knowledge.

School is extremely important for the development of human cognitive activity. This is caused by the psychological characteristics of younger students, which are characterized by almost inexhaustible cognitive abilities and willingness to learn new things. That is why teachers should use adequate pedagogical means aimed at preservation and further development of the natural curiosity of children, formation of their interest, independence and persistence in the learning process.

One of the ways to solve this problem is to turn to the theory and practice of schools, whose activities are aimed at ensuring the formation of an active and initiative person. Promising in this area is the understanding and creative use of experience of progressive schools, in particular the Waldorf school, which for almost 100 years has been fruitfully solving the problem of developing students' activity, forming creative abilities of a person, his ability to work with information, strong desire and ability to learn throughout life [12; 25; 48].

The purpose of this article is to reveal project learning as a means of development of schoolchildren's cognitive activity in Waldorf school.

2. Literature Review



The problem of project learning as a means of development of schoolchildren's cognitive activity in Waldorf school has been studied by modern scholar in some aspects. P. Kitaygorodskaya [17], O. Kobernyk [18], N. Matyash [27], M. Pavlova, J. Pitt, M. Gurevich, I. Sasova [32], E. Polat, I. Petrova, M. Bukharkina and M. Moiseeva [34], M. Romanovska [35], G. Selevko [36] and O. Ustymenko [43] investigated the specific feature of use of project activity in the learning process. N. Abashyna [2], O. Khudzey [16] and S. Shyshov [39] revealed different kinds of use of schoolchildren's project learning activity. L. Ivanova [13] characterized the stages of project learning and the role of teachers in it. I. Chechel [7] and P. Lerner [20] revealed different approaches in assessing the project learning. M. Haynes [11], M. Legutke and T. Howart [19] and I. Oliynyk [30] studied the use of projects in learning foreign languages.

Besides, M. Antoniuk [3], L. Aristova [4], N. Bibik [5], N. Boiko [6], I. Gavryshchak [8], I. Kharlamov [15], L. Lisina [21], N. Lobko-Lobanovskaya [22], V. Lozova [23], T. Shamova [37], G. Shchukina [38], I. Viktorenko [44] and D. Vilkeev [45] revealed the specific features of schoolchildren's cognitive activity and the conditions of development of it.

Moreover, N. Abashkina [1], V. Gebel and M. Glokler [9], S. Gozak [10], O. Ionova [12], F. Karlgren [14], O. Lukashenko [24], S. Luparenko [25], L. Lytvyn [26], O. Mezentseva [28], V. Novoselska [29], V. Partola [31], A. Pinskiy [33], R. Steiner [40; 41], B. Yerzhabkova and B. Skomorsky [47] and V. Zagvozdkin [48] studied the theoretical and scientific and methodological principles of schoolchildren's development in Waldorf school.

However, the problem of project learning as a means of development of schoolchildren's cognitive activity in Waldorf school has not been considered yet, which caused this study.

3. Method

According to the purpose of the article, certain methods have been used for conducting this study. They are: theoretical methods (analysis and synthesis of scientific, educational and methodical literature for comparison of different views on the researched problem, definition of conceptual and categorical apparatus) and empirical methods (questionnaire, survey, observation, conversation, dialogue, study of the results of educational activities of schoolchildren to identify the level of development of their cognitive activity).

4. Results

It is well known fact that schoolchildren (junior schoolchildren, in particular) have increased need for activity. Project learning in Waldorf school helps to meet this need of children. It means the use of active-practical projects which are certain types of work, small studies performed by schoolchildren in order to gain real experience of interaction with the world. Such projects activate a person, develop and support the activity of his will. Involving person's own willpower in learning strengthens his individual sense of "I" and develops a healthy self-confidence.

R. Steiner, the founder of Waldorf pedagogy, claimed that a person, who has normal finger mobility, has flexible thoughts and ideas. Due to practical activities in classes, it is possible to prepare a child for the inclusion of the will in the process of intellectual work [40].

The aim of project learning in Waldorf school is to form various general and special skills and abilities. The tasks of project learning in Waldorf school are: to create preconditions for the mental development of schoolchildren, based on a sense of reality; to form basic habits; to strengthen schoolchildren's will and confidence in their abilities; to develop schoolchildren's independence in learning; to promote the development of creative abilities and imagination of schoolchildren; to awaken schoolchildren's active interest in learning and a sense of responsibility for their work; to develop students' ability to use materials carefully; to encourage schoolchildren to illustrate objective processes clearly; to develop students' ability to plan work and adhere to their plan in implementation of it; to maintain schoolchildren's desire and create the conditions for lifelong learning; to develop communication skills, etc.

Needlework, housekeeping, work with metal, practical exercises in the study of theoretical subjects, drawing shapes, rhythmic recitation etc. facilitate this process. Moreover, project learning involves keeping workbooks "by epoch" (a big part of learning material studied during 2-4 weeks in main lessons) and conducting schoolchildren's own research on various topics.



In Waldorf school children have many opportunities to show their activity, creativity and talents. Keeping schoolchildren's workbooks is one of the methods that contributes to this. Schoolchildren's workbooks are small personal books that schoolchildren make while studying each subject. They make notes in them in each subject and write down the most significant ideas. Schoolchildren write down all they hear at lessons (after teacher's explanation schoolchildren write down what they remember and what impressed them deeply), illustrate the material being studied and make their additions, working with additional literature.

Through the artistic and figurative presentation of educational material and schoolchildren's own activities, students get acquainted with new knowledge. Then they independently write the text in workbooks and make appropriate drawings, which contribute to the deepening of the material. Then schoolchildren take home their workbooks with the impressions gained at school, written text and drawings, and at home students again experience the material learnt in class, depicting new or refining old drawings, supplementing their notes with their own thoughts, ideas, observations or additional information that children find on their own.

The next day, all the material studied in the previous lesson is repeated, the results of the previous school day are summed up, a short summary of the content is made, which is recorded in workbooks. At this learning stage, students do not make illustrations; letters, grammatical images, images of living plants and animals etc. have to be covered conceptually, by child's thinking.

Also, in English classes, schoolchildren draw each letter they study or a picture related to that letter, write words with it or the sounds it gives. Besides, in workbooks, students depict a fairy tale or story they hear from the teacher at the end of the lesson.

The paper in the workbooks is not lined, which helps younger students to keep the line and beautifully place the text on the page when learning to write. Also, teachers make sure that the children strive for accuracy and beauty in writing, and this contributes to the development of good handwriting. And at the end of the learning a big part of educational material, students receive not ordinary workbooks, but bright, interesting books that are their own achievement.

Working with schoolchildren's workbooks is an important means of mastering new material, and at the same time it gives students the opportunity to develop creative activity, independence and a variety of practical skills and abilities, as illustrations to texts, supplementing notes with self-found material are entirely schoolchildren's creativity.

So, workbooks give schoolchildren the opportunity to show an individual attitude to the subject. Drawing up workbooks is one of the effective means of developing children's cognitive activity as all schoolchildren try to make their workbooks the best and to record the most information in it. Workbook is also a means of expressing children's creative activity, because in them schoolchildren reflect their knowledge not only in words but also in the form of drawings, diagrams etc. In their workbooks, children write or depict information that they have obtained independently, so the compilation of workbooks is a means of forming independence and initiative, individuality and originality. The schoolchildren's activity, directed to the outside, contributes to the full perception of the environment, orientation in it and cognition of it.

Besides, schoolchildren carry out their own projects - research or pedagogical tasks on various topics (often socially significant). The topics of such projects can be different, for example: "Building a house", "Making toys", "Holidays", "Folk holidays", "Environmental protection", "My family", "My friends", "My house", "Housing and inhabitants", "My school", "My hobby", "The world around", "A man and an animal", "Fairy tales" and etc. These projects are carried out individually and in groups. Carrying out these projects direct schoolchildren to conduct various studies, the results of which were presented to the whole class and accompanied by a demonstration of hand-made demonstration materials (small products, drawings, music, postcards, calendars, cards, newspapers, etc.). Group solving of pedagogical tasks is especially encouraged, as the collaboration of "individuals who have joined their forces to accomplish a common task" [48] helps to improve interpersonal relationships in class and the emotional atmosphere of lessons. Schoolchildren help each other, jointly solve problems that arose, learn to communicate and work in a team and be responsible for the common task.

Thus, children work individually or in groups on their own small projects on a specific topic. For

instance, in the project "My Family", children glue photos or draw their relatives, the nearest and dearest, sign their names, ages, and professions and then talk about them in class. Such own activity of children always stimulate them, and they work on projects with pleasure, make cards for greeting friends or relatives, teach poems and songs devoted to them so as to tell them on holidays later.

Another joint project of primary schoolchildren is "Weather Chart Project" [46], which is carried out during the year. In order to do this, they draw a calendar, which consist of 12 pieces of paper (one piece of paper for each month). On these pieces of paper, a table is drawn, which the students hang on the wall and fill in every day of the year, drawing the weather of each day and the weather of the season in general and recording the air temperature. Similarly, during the school year, students describe one month on one piece of paper, but they are divided into groups to work on each month (schoolchildren draw up a calendar letter dedicated to the month in which they were born), make notes and drawings, which characterized certain month. And when that month comes, a calendar sheet is hung on the wall of the classroom and displayed to the whole class. Schoolchildren really enjoy the implementation of such a project, and they wait for "their" month and are happy to demonstrate their project.

Moreover, in classes schoolchildren often make different things that they use in real life. These are tasks for modeling, making applications, making toys, various household items, cooking simple dishes that are decorated by students to their own taste. For example, primary schoolchildren may have tasks to make a stove using a nut shell, cardboard, thin paper, a tube and following the teacher's instructions [42]:

Toy Raft

1. To make a raft, glue 4 walnut shells to a small cardboard rectangle.
2. Cut a sail from a piece of white paper.
3. Push a drinking straw or a twig through the sail.
4. Attach the straw to the raft with a small lump of Kooky Clay.
5. When the raft is finished, merrily, merrily, merrily float it down a stream!

In classes, children make toy boats, rafts, bird feeders, decorations for houseplants, cooked food, etc. Making real, useful things increase the activity of students; they always enjoy working on them and understand the meaning of new words directly in the process of the activity.

Moreover, creation of game situations in the study of theoretical subjects and playing life situations is of great importance for the development of children's own activity in learning. These tasks, which correspond to the child's age and spheres of learning, provide conditions in which children's thinking is not alienated from reality, but based on a sense of reality. They both help to awaken the child's activity and affect the development of his thinking, which is caused by the connection among tactile sensations, coordination of movements and the development of mental activity.

The implementation of active-practical projects allows schoolchildren to independently choose the topic of the project and perform it (select literature, paint, make notes and own observations, make things necessary for the project, express opinions etc.). For instance, in English lessons, schoolchildren ask teachers to perform additional tasks - to study the countries of the world, their capitals and local features. The children really enjoy this exercise, and they look for material, drawings, and at the end of the year do their own work - a small project in which students write the name of the country and depict what they associate this country with (for example, Egypt - the pyramids, France - Eiffel Tower, England - Big Ben, etc.). The development of educational independence is also facilitated by the use of workbooks, where younger students themselves, independently of the teachers and other students, record what they memorized from the teacher's story during the lesson, make independent notes using additional literature [25].

It is an interesting fact that in classes students often ask the teachers not to help them. They feel confident in the material studied and try to do everything themselves. In addition, schoolchildren like to imitate. As soon as one child recite a new verse on their own, all other students, even those who are not very active, try to recite it themselves, without the help of the teacher. Performing various tasks, almost all students do everything themselves, and the teachers only adjust their activities and help those who cannot cope with educational tasks on their own. Thus, project learning in Waldorf school contributes to the development of the children's independent thinking, ability to plan and organize their work [25].

The analysis of the dynamics of the degree of realization of schoolchildren's cognitive activity has shown the high effectiveness of project learning in Waldorf school, and this is due to the fact that it focuses

on age and individual characteristics of children, their needs and desires, creating conditions in which each child can realize himself, his needs and abilities, develop an individual pace and a way of assimilation of new material. Every effort and activity of a child is supported and encouraged, which ensures the formation of a positive attitude of a child to learning. Moreover, if a child does not want to perform a certain exercise, he is not punished or forced to work, but depending on his features, teachers encourage his activities (they change the type of educational work, play, perform an exercise in which a child feels confident or just give him a little rest). In our opinion, schoolchildren who do not participate in the game or do not perform tasks, but only observe them, still play and do the learning situation in their minds, solve problems and gradually become interested in the process of cognition, because they still have a highly developed ability to imitate.

The talks with schoolchildren and teachers has shown that younger students actively participate in the learning process, show interest in acquiring new knowledge and try to complete all tasks because they meet their interests in the learning process and satisfy their educational needs. Educational activities encourage children to show their abilities, achieve the goal and realize the desires and interests in educational activities in ways which are adequate to each child, contribute to the formation of certain personality traits (openness, perseverance, determination, etc.).

For instance, the implementation of the project "My Family in English lessons contributes to the development of schoolchildren's creative abilities. In particular, by performing and telling about their family, some students show high results in the application of acquired knowledge and continue to build new sentences correctly and even use grammatical constructions, which are not intended in their projects. This indicates that during the preparation of the project, learning the necessary words and grammatical constructions, students begin to "feel" the language, the peculiarities of its pronunciation and sentence construction. This encourages them to continue working more actively at lessons and use their knowledge in different situations.

So, the observation of the educational activity and analysis of the products of this activity have shown that project learning in Waldorf school encourages schoolchildren to show their abilities and talents and creatively apply the material studied, awakens the talents of each student and creates the best conditions for their development. In addition, the use of a large number of creative exercises contributes to the development of intelligence and imagination of younger students [12; 25].

5. Discussion and Conclusion

So, project learning in Waldorf school allows schoolchildren to test themselves in various activities and contributes to the formation of practical skills, development of individuality, hard working, purposefulness and initiative. Project learning is aimed at the formation of various practical skills and provided for group and individual solution of various pedagogical tasks, keeping workbooks and creation of game situations in the study of theoretical subjects and playing life situations. Active-practical projects help to identify schoolchild's own attitude to different school subject, the development of their aesthetic feelings and cognitive activity. When working on a project, schoolchildren carry all the material related to this research through themselves, and this provides a better acquisition of new knowledge.

The implementation of the projects helps students to enrich their vocabulary, as well as contributes to the development of attention, memory and will, as students focus on completing these tasks every day for a long period. At the same time, these projects draw the child's attention to the world around him, which helps him learn the "inside" of nature, experience its phenomena throughout the year and day, feel deep respect for people and everything that exists in the world. The active-practical projects give schoolchildren the opportunity to express themselves in different areas, to develop their individuality, inclinations and talents. The projects clearly show the level of creativity, independence of students and the level of development of their cognitive activity. The active-practical projects give schoolchildren the opportunity to independently understand the material being studied and to operate it freely.

So, the involvement of the practical aspects in the process of studying academic disciplines in Waldorf school contributes to the activation of thinking and own practical activities of students, creating an active working atmosphere in the classroom, which really stimulates the development of schoolchildren's cognitive activity, their attentiveness, perseverance and desire to learn new things.

References



1. Abashkina N. Organization of educational process at Waldorf school. Primary school 1993; 7: 41–45.
2. Abashyna N. Development of key life competencies through the method of projects. In: Shevtsova S., Iermakov I., editors. Method of projects: traditions, perspectives, life results. Kyiv : “Department”; 2003. p. 257-258.
3. Antonyuk M. Development of cognitive activity of 5-7 grades pupils of secondary school in the process of solving technical problems. PhD dissertation. Kyiv : Academy of Pedagogical Sciences of Ukraine. Institute of Pedagogy; 1993. 162 p.
4. Aristova L. Activity of schoolchildren teaching. Moscow: Education; 1968.138 p.
5. Bibik N. Formation of cognitive interests of junior schoolchildren. Kyiv : “VIPOL”; 1998. 200 p.
6. Boiko N. Didactic conditions of formation of cognitive interest in schoolchildren. PhD dissertation. Kharkiv : H. S. Skovoroda Kharkiv State Pedagogical University; 1998. 181 p.
7. Chechel I. The method of projects, or Attempt to relieve a teacher from duties of an all-knowing oracle. Head teacher 1998; 3: 11-16.
8. Gavryshchak I. Formation of cognitive activity of students in the educational process of gymnasiums of Galicia in the second half of the XIX century. PhD dissertation. Ivano-Frankivsk : Vasyl Stefanyk Precarpathian National University; 2000. 217 p.
9. Gebel V., Glokler M. Child. From infancy to adulthood: Book for parents, teachers and doctors. Kaluga: Duhovnoie poznanie; 2004. 680 p.
10. Gozak S. Hygienic assessment of Eurhythmy lesson at Waldorf school. Environment and health 2005; 1: 17-18.
11. Haynes M. Project management. Form idea to implementation. USA : Crisp Publication Inc.; 1989. 96 p.
12. Ionova O. Anthroposophically oriented approach to adults' education. Pedagogics and Psychology. Newsletter of the National Academy of Educational Sciences of Ukraine 2018; 4: 12-19.
13. Ivanova L. Projecting in teaching: didactic principles. Teacher 2004; 6: 11-15.
14. Karlgren F. Education for freedom. Moscow : Parsifal; 1998. 272 p.
15. Kharlamov I. How to activate the teaching of schoolchildren (Didactic essays). Minsk: Narodnaya asveta; 1975. 208 p.
16. Khudzey O. A method of projects in foreign preparation of students of the specialized schools with deep study of foreign languages. Bulletin of the National Academy of the State Border Guard Service of Ukraine 2015; 5. URL: file:///C:/Users/Сергей%20и%20Света/Downloads/Vnadped_2015_5_21.pdf
17. Kitaygorodskaya P. The use of project tasks at English lessons. Foreign languages in educational institutions 2003; 5.
18. Kobernik OM Theory and methods of psychological and pedagogical design of educational process in school. Kyiv : Scientific World; 2001. 199 p.
19. Legutke M., Howard, T. Process and Experience in the Language Classroom. London & New York: Longman Group UK Limited; 1991. 350 p.
20. Lerner P. Projecting as the main type of cognitive activity of schoolchildren (on the example of mastering the subject “Technology”). Head teacher 2003; 7: 6-10.
21. Lisina L. Development of cognitive activity of high school students in the process of studying the subjects of the physical and mathematical cycle: Abstract of PhD dissertation. Kyiv : M. P. Dragomanov National Pedagogical University; 2000. 20 p.
22. Lobko-Lobanovskaya N. Teaching Differentiation as a Method of Forming the Cognitive Activity of Schoolchildren. PhD Dissertation. Kharkiv : H. S. Skovoroda Kharkiv National Pedagogical University; 1991 .174 p.
23. Lozova V. A holistic approach to the formation of cognitive activity of students. Kharkiv: “RCNIT”, H. S. Skovoroda Kharkiv National Pedagogical University; 2000. 175 p.
24. Lukashenko O. Problem of maintaining health in young learners in Waldorf pedagogy. Abstract of PhD dissertation. Kharkiv : H. S. Skovoroda Kharkiv National Pedagogical University; 2009. 20 p.
25. Luparenko S. Development of Junior Schoolchildren’s Cognitive activity by Means of Waldorf School. PhD dissertation. Kharkiv: H. S. Skovoroda Kharkiv National Pedagogical University; 2008. 227 p.
26. Lytvyn L. Ideas of Waldorf pedagogy in Ukraine: monograph / Ed. S. O. Sysoieva. Kyiv: “Edelweiss”; 2012. 200 p.

27. Matyash N. Project method of teaching in the system of technological education. *Pedagogy* 2000; 4: 38-43.
28. Mezentseva O. Waldorf pedagogy in the world. *Information collection for headmaster and head of kindergarten* 2014; 20: 88-96.
29. Novoselska V. Aesthetic education of pupils in Waldorf schools. Abstract of PhD dissertation. Kyiv : Institute of Problems on Education of the Academy of Pedagogical Sciences of Ukraine; 2007. 20 p.
30. Oliynyk I. The use of project method at English lessons as one of the ways to form student's communicative competence. Kotovsk, 2012. 21 p. URL : <http://www.nmc.od.ua/wp-content/uploads/2013/10/Oliynyk.pdf>
31. Partola V. The problem of forming the intellectual skills of junior pupils in the learning process of Waldorf school. Abstract of PhD dissertation. Kharkiv : H. S. Skovoroda Kharkiv National Pedagogical University; 2012. 20 p.
32. Pavlova M., Pitt J., Gurevich M., Sasov I. Method of projects in technological education: A guide for teachers. Moscow: "Ventana Graf"; 2003. 296 p.
33. Pinskiy A. Paideia. Moscow: Chastnaya shkola; 1997. 368 p.
34. Polat E., Petrova I., Bukharkina M., Moiseeva M. What is a project? *Open lesson* 2004; 5-6: 10-17.
35. Romanovska M. Method of projects in the educational process. Kharkiv : Vesta, Publishing House "Ranok"; 2007. 160 p.
36. Selevko G. K. Modern educational technologies. Moscow: Public education; 1988. 256 p.
37. Shamova T. Activation of the teaching of schoolchildren. Moscow: Pedagogy; 1982. 208 p.
38. Shchukina G. Pedagogical problems of the formation of students' cognitive interests. Moscow: Pedagogy; 1988. 208 p.
39. Shyshov S. Project method: problems and prospects. In: *Method of projects in technological education of schoolchildren*. St. Petersburg: Publishing house of Herzen State Pedagogical University of Russia; 2001. p. 7-15.
40. Steiner R. Modern spiritual life and pedagogy. Moscow: Parsifal; 1996. 208 p.
41. Steiner R. Spiritual renewal of pedagogy. Moscow: Parsifal; 1995. 256 p.
42. Toy Raft. *English Learner's Digest* 2003; 14: 8.
43. Ustyomenko O. Types of projects for foreign language teaching. *Young scientist* 2016; 2(29): 347-352.
44. Viktorenko I. Formation of cognitive activity of junior schoolchildren in the process of organizing their communication with parents. PhD dissertation. Kharkiv : H. S. Skovoroda Kharkiv National Pedagogical University; 2002. 180 p.
45. Vilkeev D. Development of cognitive activity and independence of students in evening schools in the learning process. Kazan: Kazan University Publishing House; 1961. 174 p.
46. Weather Chart Project. *English Learner's Digest* 2001; 19: 9.
47. Yerzhabkova B., Skomorsky B. Should we introduce a Waldorf school in Ukraine. *Horizon* 2002; 2: 152-156.
48. Zagvozdkin V. (Ed.) and others. *Training Programs of Waldorf School*. Moscow: Narodnoe obrazovanie; 2005. 528 p.