

УДК 37.15(4)“18/19”-043.85-026.195  
DOI: 10.31499/2307-4906.3.2022.265921

## INFLUENCE OF REFORMIST PEDAGOGY ON THE DEVELOPMENT OF EUROPEAN EDUCATION IN THE LATE 19<sup>th</sup> – EARLY 20<sup>th</sup> CENTURY

**Ilona Boichevska**, Candidate of Pedagogical Sciences (Ph.D.), Docent, Associate Professor at the Foreign Languages Department, Pavlo Tychyna Uman State Pedagogical University.

ORCID: 0000-0001-8371-8947

E-mail: boy\_ilona@ukr.net

**Liudmyla Veremiuk**, Candidate of Pedagogical Sciences (Ph.D.), Docent, Associate Professor at the Foreign Languages Department, Pavlo Tychyna Uman State Pedagogical University.

ORCID: 0000-0002-6221-419X

E-mail: lyudmila.leoni@ukr.net

*The article highlights the impact of reformist pedagogy on the development of European education in the end of the 19<sup>th</sup> – early 20<sup>th</sup> century. The trends, directions, and works of different pedagogues-creators of their own author's schools, which belonged to the reformist pedagogy, were analyzed. It has been established that the problem of labour training aroused from the epoch of the Renaissance. Representatives of democratic direction, such humanists-educators as F. Rable and M. Montaigne developed the ideas of labour training. An English educator, philosopher J. Locke put up the need for manual labour. As a result of analysis of different pedagogues-reformists' activity it has been revealed that labour schools functioning was the prerequisite for the emergence of ideas of "pedagogy of action", proposed by W. A. Lay.*

**Keywords:** European reformist pedagogy; labour school; school of action; pedagogy of pragmatism; psychological and physiological features; organic curriculum; productive work; developmental training; school reform; formal education.

## ВПЛИВ РЕФОРМАТОРСЬКОЇ ПЕДАГОГІКИ НА РОЗВИТОК ЄВРОПЕЙСЬКОЇ ОСВІТИ В КІНЦІ ХІХ – НА ПОЧАТКУ ХХ СТОЛІТТЯ

**Ілона Бойчевська**, кандидат педагогічних наук, доцент, доцент кафедри іноземних мов, Уманський державний педагогічний університет імені Павла Тичини.

ORCID: 0000-0001-8371-8947

E-mail: boy\_ilona@ukr.net

**Людмила Веремюк**, кандидат педагогічних наук, доцент, доцент кафедри іноземних мов, Уманський державний педагогічний університет імені Павла Тичини.

ORCID: 0000-0002-6221-419X

E-mail: lyudmila.leoni@ukr.net

*У статті висвітлено вплив реформаторської педагогіки на розвиток європейської освіти в кінці ХІХ – на початку ХХ століття. З'ясовано, що до реформаторської педагогіки належали як течії та напрями, так і окремі педагоги-творці власних авторських шкіл. До перших належать нове виховання з його новими школами, що спиралися на педоцентричні позиції і вільний*

*розвиток особистості (А. Фер'єр); експериментальна педагогіка (Е. Мейман, Г. Ришар); педагогіка дії (В. А. Лай); трудова школа з її ідеями активізму та мануалізму й підготовки до життя (Г. Кершенштейнер); соціальна педагогіка (П. Натопн); педагогіка особистості (Г. Гаудіг).*

*Встановлено, що проблема трудового навчання бере свій початок від епохи Відродження. На початку ХХ ст. набув поширення реформаторський рух, який визначався такими категоріями: продуктивна робота, трудове навчання, трудова школа. Ідеї трудового навчання розвинули представники демократичного напрямку, гуманісти-просвітителі Ф. Рабле та М. Монтень. Англійський просвітник, філософ Дж. Лок висував потребу у ручній праці. Досліджено, що послідовником М. Монтеня і Дж. Лока став педагог Ж.-Ж. Руссо, який рішуче вказував на ручну працю як засіб морального розвитку. Працю як вид навчальної діяльності пропагували педагоги Й. Герbart, Г. Кершенштейнер, Й.-Г. Песталоцці, Й. Фіхте, Ф. Фребель, Е. Шенкендорфф та ін. Під час проведеного дослідження було з'ясовано, що лідером реформаторської педагогіки, на думку багатьох учених, був Дж. Дьюї, творець прагматичної педагогіки, діяльність якого асоціюється з новим вихованням та трудовою школою. Виявлено, що передумовою виникнення ідей «педагогіки дії», висунутої В. А. Лаєм, була діяльність трудових шкіл.*

**Ключові слова:** *європейська реформаторська педагогіка; трудова школа; школа дії; педагогіка прагматизму; психолого-фізіологічні особливості; органічний навчальний план; продуктивна робота; розвивальне навчання; реформа школи; формальна освіта.*

The current stage of development of education in Ukraine reflects changes in socio-economic and political life, involving the modernization of the entire educational system. In this regard, reformation ideas are quite relevant. After all, modernization determines a number of measures: decline of authoritarian pedagogy; creating conditions for the formation of an active, responsible, creative, and independent personality, capable of self-education and self-development; providing conditions for the realization and self-realization of the child's essential forces in various activities.

In our opinion, analysis, systematization and implementation of the ideas of pedagogical experience of domestic and foreign teachers of the past will help to make such modernization changes in school education. The historical period of the Renaissance, as well as reformist pedagogy, which were marked by the development of humanistic ideas, attract particular attention of modern researchers of the history of education. Reformist pedagogy the development of which occurred in the late 19<sup>th</sup> – early 20<sup>th</sup> century is of particular interest.

Different stages of development of reformist pedagogy in the history of pedagogy were considered and analyzed by such scholars as B. Bim-Bad, U. Carle, M. Clarin, M. Depaere, A. Dzhurinsky, H. Flath, E. Heineken, C. Hopf, L. Honcharov, T. Kesslerling, T. Kochubey, V. Kravets, O. Kuznetsova, I. Liubchenko, Z. Malkova, O. Maistruk, S. Mendlina, A. Piskunov, O. Rogacheva, K. Salimova, O. Svyrydiuk, L. Veremiuk, N. Voskresenska, N. Weikshan, B. Wolfson, B. Yesipov. The achievements of the reformist pedagogy of the late 19<sup>th</sup> – early 20<sup>th</sup> centuries are covered in the dissertation research of a number of modern Ukrainian scientists, such as O. Barylo, I. Batchaeva, T. Kravtsova, T. Petrova, A. Rastygina and others.

The aim of the article is to trace the development of reformist pedagogy in the late 19<sup>th</sup> – early 20<sup>th</sup> centuries and its impact on the education system in Europe.

Reformist pedagogy developed according to the following directions: experimental pedagogy (E. Meumann, G. Richard), pragmatism (J. Dewey), labour schools, civic education (G. Kershensteiner), new education and new schools (A. Ferrier), “pedagogy of action” (W. A. Lay), free education (E. Kay, M. Montessori, G. Charrelman), social pedagogy

(E. Zalviurk, A. Lichtvark, P. Natorp, etc.). The general goal of the reformist pedagogy was the formation of a harmoniously developed personality, characterized by individual and social virtues, moral virtues, and such character traits as independence, self-affirmation, initiative and activity, physical health, hygiene, and intelligent lifestyle.

Examining the legacy of reformist teachers, it has been found that they relied on the ideas of classical German philosophy in pedagogical views and approaches to the study of the child (I. Kant, G. Hegel, L. Feuerbach) and on the basis of different directions of philosophy of the late 19<sup>th</sup> – early 20<sup>th</sup> century (positivism, behaviourism, existentialism). According to L. Feuerbach, everything in a person is valuable, emotional and psychological life is no less important than the mind. It is also very important that man lives in direct contact with nature because external nature is close to the nature of man himself. The human essence quite harmoniously manifests itself in human existence: the life of nature and the conditions of existence are in deep unity with the human essence [11].

Behaviourism is one of the directions of philosophy and psychology of the late 19<sup>th</sup> – early 20<sup>th</sup> century (from the English “behaviour”). It is based on the stimulus that reduces human behaviour to mechanical, machine-like acts in response to external stimuli. Some representatives of behaviourism are J. Watson, E. Thorndike, E. Tolman, C. Hall and others [1]. The formula of behaviourism is “stimulus–reaction”, proposed by J. Watson, excludes the mediating mental link. Behaviourism denies the effective role of the psyche, consciousness, and sometimes even the fact of their existence. The dependence of various mental functions on motor activity was established at that time by experimental psychology. J. Watson pointed out that objective muscular processes can be a worthy replacement for subjective mental acts. Based on this, the scientist explained the peculiarities of the development of mental activity of the child and motivated it by the fact that a person thinks with muscles [9, p. 87–165].

Based on the fact that the development of the psyche depends on the child’s living conditions, on stimuli, and social environment, behaviourists rejected the idea of age periodization. In their opinion, there are no common patterns for all children's development at full age. It is the ideas of behaviourism that we trace in the activities of the “school of action”, where the mental and psychological development of the child and his learning is dependent on reflexes to external stimuli. Therefore, the founder of the “school of action” W. A. Lay rightly claimed that education is dependent on hereditary and “school” diseases, such as nervousness, headaches, and myopia [18, p. 197–215].

Reformist pedagogy included currents and trends, as well as individual teachers, and creators of their own author’s schools. So, it consisted of a new upbringing with new schools, based on pedocentric positions and the free development of personality (A. Ferrier); experimental pedagogy, which was built on the concept of quantitative methods of natural sciences (E. Meumann, G. Richard) [8, p. 56–62]; pedagogy of action (W. A. Lay); labour school with its ideas of activism and manualism and preparation for life (G. Kershensteiner); social pedagogy of P. Natorp, who emphasized the social nature of education and its conditionality in social life; pedagogy of personality by G. Gaudiga, who formed the ideas of artistic and creative development of the individual on the basis of amateurism and creativity. The activity of labour schools is a prerequisite for the emergence of ideas of “pedagogy of action”, developed by W. A. Lay. In general, the problem of labour training dates back to the Renaissance. During this period, the Reformation was carried out in all spheres of life. The ideas of labour training were developed by such representatives of the democratic trend in the

culture of the Renaissance as humanists-educators Francois Rabelais and Michel Montaigne.

Under the influence of M. Montaigne, the English educator, philosopher John Locke (1632–1704) put forward the need for manual labour. In “The Experience of the Human Mind”, John Locke developed a theory of cognition of material empiricism, according to which sensory experience is the only source of all ideas. In his opinion experienced ideas are material for knowledge and they become knowledge only after their processing by the activity of the mind [3, p. 7].

J.-J. Rousseau became a follower of M. Montaigne and J. Locke. This pedagogue strongly pointed to manual labour as a means of moral development. In particular, he wrote that by means of physical exercises and manual labour he imperceptibly instills in his student a tendency to think, because the student must work well and think like a philosopher [3, p. 7]. Rousseau had complex and contradictory views on education. On the one hand, he was aware of the need for education, on the other hand, he believed that a person cannot educate, and even should not, because he is not prepared for this in conditions of inequality between people. The purpose of education was, first of all, to educate a person, not an official, a soldier, a judge or a scientist, to educate him for active social activity. The French educator attached special attention to labour education, recognizing social work as an inevitable human duty. When choosing a craft for labour training, the scientist put forward a number of requirements that it must meet. In particular, labour training should: 1) create useful things; 2) be combined with human dignity; 3) correspond to the sex of the pupil; 4) require mental work; 5) not be harmful.

Such pedagogues as J. Fichte, F. Froebel, J. Herbart, G. Kershensteiner, J. Pestalozzi, E. Schenkendorf, and others also promoted work as a type of educational activity. According to J. Pestalozzi, the process of cognition begins with sensory perceptions, which are then processed by consciousness. The teacher was convinced that the drawbacks of modern school education could be eliminated only if any training is based on observation and research, after which appropriate conclusions and generalizations should be made. It is because of visual observations, auditory, and other senses that thoughts are aroused and judgments are formulated. In addition to the ability to think, according to J. Pestalozzi, children should be instilled with practical skills, because mastering knowledge without the ability to use it is a major disadvantage of learning. A system of special exercises, which gradually becomes more complicated, is necessary to form this quality. Physical and mental characteristics of students should also be taken into account [6].

The German pedagogue-democrat Friedrich-Wilhelm-Adolf Disterweg (1790–1866) was one of the most famous Pestalozzi’s followers. Even during his life, he was called ‘the teacher of German teachers’. In his opinion, the main purpose of education is the harmonious development of possible human talents, which is achieved through amateur activities. F. Disterweg paid great attention to the knowledge of psychology, considered it as the basis of the teacher’s work, clearly formulated the basics of didactics of developmental learning [5, p. 217–218].

The same ideas were quite close to the thinker of ethical idealism J. Fichte because for him all things were products of action. At the heart of J. Fichte’s philosophy is the assertion that the active attitude to the subject precedes the theoretical and contemplative attitude to it. According to J. Fichte, human consciousness is given at birth and generates itself. Its obviousness is based not on contemplation but on action, it is not seen by the intellect but

asserted by the will. J. Fichte's views are a general theory of activity, the main principle of which is "action–activity" (Tathandlung) [14, p. 683]. J. Fichte demanded the pupils in his small "educational country" to get used to working. His idea of an "educational country" spread through its varieties in North America (the American school-city system) and Germany.

According to J. Herbart, physical labour is an excellent preparation for planned activity and the main means of discipline necessary for the development of the character. J. Herbart noted that a goal, which generates an idea of the material and the order, should be defined in the process of various work [4, p. 26–30]. The purpose of education, according to the scientist, is the formation of virtuous people who are able to adapt to the existing socio-political system and obey it.

F. Froebel was the next follower of J. Pestalozzi and J. Fichte. His theory and practice had a great influence on the teaching of handicrafts. According to F. Froebel, not the intellectual but the practical side of man was the basis of moral development. In his opinion, the desire to work should become a central point of education. F. Froebel noted that action precedes thinking and forms consciousness in the life of a child and an adult, so labour training should be the main subject of teaching, and all the rest should be derived from it. On the contrary, according to J. Herbart's students, ideas are more primary than action, therefore the formation of ideas should be at the center of teaching, and work as the use of knowledge can only join it. The basic biological process of reaction and the basic pedagogical principle of action is constructed in these contradictions of the Herbartian and Froebel schools [3, p. 12–14].

It should be noted that in the late 18<sup>th</sup> – early 20<sup>th</sup> centuries in Germany, handicrafts were introduced in institutions for the children of poor upbringing: in orphanages, schools for the blind, etc. Consequently, in the 70s of the 19<sup>th</sup>-century German industry failed, resulting in the introduction of manual labour in schools in order to educate craftsmen [10, p. 72–88]. Thanks to the activity of E. Schenkendorf, the "Central Committee for the Promotion of Handicrafts and Domestic Work" was formed, which later, in 1866, became the "German Union of Handicrafts for Boys". Therefore, the reformist movement became widespread, which was determined by such categories as productive work, labour training and labour school.

The German critic W. Mittenzwei was convinced that the implementation of the pedagogical principle of action created a solid basis for such school reform, which can unite all the reformist efforts. The author concluded that perception, mental processing and external action are united. In the article "Towards the reform of natural history teaching in the interests of education" (Zur Reform des naturgeschichtlichen Unterrichts im Dienste der Erziehung) the author emphasized the need for verbal, artistic and experimental creativity on behalf of the student [19, p. 23].

The headteacher of schools in Munich, Dr. H. Kerschensteiner, who most persistently introduced manual labour in German schools, organized education in the eighth grades of folk schools in such a way that students received training in industrial professions [16, p. 126]. The following aspects are characteristic of H. Kerschensteiner's reform intentions:

- definition of the goal that the "school of the future" should set for itself. H. Kerschensteiner's labour school served the purpose of state-citizen education;
- the desire to expand the meaning of the concept of "labour school";

- implementation of the idea of a labour society in practice (Arbeitsgemeinschaft);
- reducing the volume of educational material. According to the scientist, the educational material should be specified and selected in accordance with the student's future profession;
- teaching in a separate class should be concentrated in the same hands, that is, the same teacher should lead the class throughout the course;
- H. Kershensteiner's reform of improving school affairs from inside. H. Kershensteiner considered changes in educational methods and curricula to be the main task of the reform [4, p. 26–33].

According to many scholars, John Dewey (1859–1952) was the leader of reformist pedagogy, the creator of pragmatic pedagogy, which is associated with a new education and labour school. The pedagogy of pragmatism (“pedagogy of action”) was widespread in the United States and England. Pragmatism is a philosophy that, according to J. Dewey, is obliged not to contemplate and copy reality, but to help people solve life problems, their life “business”. J. Dewey's views were based on the assertion that different types of human activity are tools designed to solve individual and social problems. Truth must be determined by its practical effectiveness and usefulness. Therefore, it is necessary to establish a school on the principles of practical training, which would ensure the expression of personal activity and individuality of students. The German representative of the reformist pedagogy W. A. Lay based his activity on the principle of John Dewey's pragmatism [14, p. 44–46]. It should be noted that J. Dewey's pedagogical teachings are mostly related to I. Kant's ideas and W. James's pragmatism, rightly emphasized the sensuality of man, the essence of human nature [2, p. 1–16].

In the early 20<sup>th</sup> century, the platform of J. Dewey was formed in England and Germany, which was mainly based on the ideas of work in elementary schools and the Statute of child's activity, which was embodied in the concept of the labour school. In the 60s and 80s of the 20<sup>th</sup> century in the USA and Great Britain, supporters of the “principle of learning through action” updated the Statute of “pragmatic pedagogy”, according to which any kind of creative work was declared as an activity if the student was an active participant in it (non-pragmatic pedagogy). The subject principle of education was contrasted with integrated courses that combined fragmented material from various disciplines around a topic chosen based on the specifics of local conditions and children's interests. The ideas of “pragmatic pedagogy” continue to spread, being reflected in the statutes of humanistic pedagogy, in the concepts of education for survival, “community education” [7, p. 39–42].

J. Dewey's pedagogy, which covered psychological and philosophical aspects, school problems, social issues, political theories, and education reform, had a noticeable influence on the reformist pedagogy and W. A. Lay's “pedagogy of action”. W. A. Lay outlined the requirements for the labour school in one of his main works “Experimental didactics”. He considered work not as an academic subject, but as a principle of teaching all disciplines. Manual labour, according to W. A. Lay, should be introduced into public schools primarily as a means of mental, physical and spiritual development of students [15, p. 161–169]. In 1910, at a meeting of teachers in Strasbourg, W. A. Lay made a speech on new pedagogical currents and drew attention to a significant confusion of pedagogical concepts and terms and proposed to differentiate the concepts of “labour school” and “school of action” as they do not match, although have common features. Labour school meant productive work, and school of action

meant versatile activity, which included productive work as a component [5, p. 24–37].

In the book “School of action. Reform of the school in accordance with the requirements of nature and culture”, published in 1911, V. A. Lay developed the ideas of a school-community, in which the natural and social environment is modelled, where the student learns to harmonize his actions with the laws of the environment and the requirements of the community [12, p. 239–257]. Based on the ideas of pedocentrism, the pedagogue saw the primary task of society in creating a biological and social environment favourable for personality development [13, p. 102–113].

According to W. A. Lay’s main didactic principle, teaching subjects should be combined, on the one hand, into a sensory group, the center of which would be observation and subject learning (Sachunterricht), and on the other hand, into a motor group, and visual elements should be in the foreground (formal education – Formunterricht). Both groups should be in close interaction and merge into sensory-motor unity [17, p. 102–113]. On the basis of the scheme of the pedagogical process proposed by him, W. A. Lay built “an organic curriculum”. He divided all teaching into “observational-physical” and “visual-formal”. The first type includes everything related to perception: the life of nature (history, physics, chemistry, and geography), the life of a person (history, civics, economics, morality, philosophy, and pedagogy). The second type includes everything that, according to W. A. Lay, provides stuff for expression: images, experiments, verbal images (language), artistic images and so on [3, p. 123–128].

Thus, taking into account the above mentioned, the ideas of representatives of classical German philosophy (I. Kant, H. Hegel, L. Feuerbach, W. Lay, etc.) about man as a complete independent active being, about a dialectical approach to the study of man, about personality development, about the combination of natural (biological) and social in a person, as well as the position of the anthropological approach are of great scientific importance in the reformist pedagogy and had a significant influence on the development of pedagogy in the late 19<sup>th</sup> – early 20<sup>th</sup> centuries. In addition, the concepts of non-classical philosophy of the 19<sup>th</sup> and early 20<sup>th</sup> centuries became the basis of child study by representatives of reformist pedagogy. The result of the study of the general historical, economic and social development of the countries of Western Europe and the USA during the period under study was the identification of socio-economic prerequisites that contributed to the emergence and development of the “school of action” (“pedagogy of action”) in the context of reformist pedagogy. The immediate factors that caused the emergence of “pedagogy of action” include: the development and spread of the reformist movement, which was defined by such categories as productive work, labour training, labour school; promoting the child’s self-realization in the direction of satisfying personal pragmatic interests; inability of the mass school to educate a person who is able to think creatively, out of the box, to meet new social requirements; the need to bring the content of education closer to the real needs of each person. The pedagogical principles of reformist pedagogy and the “school of action” in particular were essential for European pedagogy, because unlike the classical education of that time, education in the “school of action” was based on free familiarization of children with the surrounding world and contributed to their comprehensive development. The ideas of reformist pedagogy and “pedagogy of action” in particular continue to spread, being reflected in the humanistic pedagogy. Further research should be aimed at investigating of peculiarities of the “school of action” and its contribution to the world pedagogy.

---

## СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ

1. Біхевіоризм. Вікіпедія (вільна енциклопедія). URL: <http://uk.wikipedia.org/wiki/Біхевіоризм>.
2. Дьюи Дж. Моя педагогическая вера. *Свободное воспитание*. 1913–1914. № 12. С. 1–16.
3. Лай В. А. Методика естественно-исторического преподавания / пер. с нем. и предисл. М. М. Соловьева. СПб., 1914. 172 с.
4. Лай В. А. Школа действия. Реформа школы сообразно требованиям природы и культуры: авторизованный перевод с нем. Е. Пашуканиса. *Школа и жизнь*. 2-е изд. Петроград, 1920. 158 с.
5. Лай В. А. Экспериментальная педагогика. М., 1909. 342 с.
6. Песталоцці. Вікіпедія (вільна енциклопедія). URL: <http://ua.textreferat.com/referat-12806-3.html>.
7. Пішванова В. Соціально-педагогічний експерименталізм Дж. Дьюї: моральний аспект. *Вісник книжкової палати*. 2002. № 6. С. 39–42.
8. Степаненко А. В. Концепція експериментальної педагогіки з огляду Е. Меймана та В. Лая. *Наука, освіта, суспільство очима молодих*: матеріали Всеукр. конф. Рівненського державного гуманітарного університету (10–11 травня 2006 р.). Рівне, 2006.
9. Уотсон Д. Психология как наука о поведении. М.-Л., 1926. 277 с.
10. Уффрехт Б. Свободная школьная и ремесленная община Летцинген. *Опытные школы в Германии*. М.: Новая Москва, 1926. С. 72–88.
11. Феєрбах Людвіг. Вікіпедія (вільна енциклопедія). URL: [http://uk.wikipedia.org/wiki/Людвіг\\_Феєрбах](http://uk.wikipedia.org/wiki/Людвіг_Феєрбах).
12. Deuchler G. Übersicht Meumanns wissenschaftliche Arbeiten. *Zeitschrift für pädagogische Psychologie und experimentelle Pädagogik*. 1915. Band 16. S. 239–257.
13. Dr. Meumann. E. Mitteilungen und Diskussionen. Zum Arbeitsplan. Psych.-päd. und didakt. Vorschläge von W. A. Lay. *Die experimentelle Pädagogik*. Leipzig, 1907. IV Band. Heft 3/4. S. 102–113.
14. Enzyklopedisches Handbuch der Pädagogik / herausgegeben von W. Rein. 3. Band, 2. Auflage. Langensalza: Herman Bayer und Söhne, 1905. 950 S.
15. Ingenkamp K. «Die experimentelle Pädagogik» und ihre Herausgeber 1905 und 1906. *Empirische Pädagogik*. 1987. Jg. 1. S. 161–170.
16. Kerschensteiner G. Die Entwicklung der ziehnerischen Begabung München, 1905. 173 S.
17. Lay W. A. Zum Arbeitsplan. Psychologisch-pädagogische und didaktische Vorschläge von W. A. Lay. *Die Experimentelle Pädagogik. Organ der Arbeitsgemeinschaft für experimentelle Pädagogik mit besonderer Berücksichtigung der experimentellen Didaktik und der Erziehung schwachbegabte und abnormer Kinder*. 1905. I. Band. Heft 1/2. S. 102–113.
18. Lay W. A. Experimentelle Didaktik. Ihre Grundlegung mit besonderer Rücksicht auf Willen und Tat. Leipzig, 1910. 679 S.
19. Lay W. A. Tatschule Als natur- und kultur gemäß Schulreform. Zugleich Anklage und Mahnruf. Osterwiek/Harz, 1921. 98 S.

## REFERENCES

1. Bikhevioryzm [Behaviorism]. URL: <http://uk.wikipedia.org/wiki/Bikhevioryzm> [in Ukrainian].
2. D'yui, Dzh. (1913–1914). Moya pedagogicheskaya vera [My pedagogical belief]. *Svobodnoye vospitaniye*, 12, 1–16 [in Russian].
3. Lay, W. A. (1914). *Metodika yestestvenno-istoricheskogo prepodavaniya*. [Methodology of natural historical teaching]. Sankt-Peterburgh [in Russian].
4. Lay, W. A. (1920). *Shkola deystviya. Reforma shkoly soobrazno trebovaniyam prirody i kul'tury* [The school of action. Reform of the school in accordance with the requirements of nature and culture], avtorizovannyy perevod s nem. Ye. Pashukanis. Petrograd: Shkola i zhizn' [in Russian].
5. Lay, W. A. (1909). *Eksperimental'naya pedagogika* [Experimental pedagogics]. Moskva [in Russian].
6. Pestalotstsi. Vikipediya (vilna entsyklopediya). URL: <http://ua.textreferat.com/referat-12806-3.html> [in Ukrainian].
7. Pishvanova, V. (2002). Sotsialno-pedahohichniy eksperymentalizm Dzh. Dyuyi: moralnyy aspekt [Social and pedagogical experimentalism of J. Dewey: moral aspect]. *Visnyk knyzhkovoyi palaty*, 6, 39–42 [in Ukrainian].
8. Stepanenko, A. V. (2006). Kontseptsiya eksperymental'noyi pedahohiky z ohlyadu E. Meymana ta V. Laya [The concept of experimental pedagogy from E. Meumann's and V. Lay's point of view]. *Nauka, osvita, suspilstvo ochyma molodykh*: proceedings of the Conference. Rivne [in Ukrainian].



9. Uotson, D. (1926). *Psikhologiya kak nauka o povedenii* [Psychology as a science of behaviour]. [in Russian].
10. Uffrekht, B. (1926). Svobodnaya shkol'naya i remeslennaya obshchina Lettslingen [Free school and craft community of Letzlingen]. *Opytnyye shkoly v Germanii*. Moskva: Novaya Moskva, 72–88 [in Russian].
11. Feyerbakh, Lyudvih. Vikipediya (vilna entsyklopediya). URL: [http://uk.wikipedia.org/wiki/Lyudvih\\_Feyerbakh](http://uk.wikipedia.org/wiki/Lyudvih_Feyerbakh) [in Ukrainian].
12. Deuchler, G. (1915). Übersicht Meumanns wissenschaftliche Arbeiten. *Zeitschrift für pädagogische Psychologie und experimentelle Pädagogik*. Band, 16, 239–257 [in German].
13. Dr. Meumann, E. (1907). Mitteilungen und Diskussionen. Zum Arbeitsplan. Psych.-päd. und didakt. Vorschläge von W. A. Lay. *Die experimentelle Pädagogik*. Leipzig, IV Band, Heft 3/4, 102–113 [in German].
14. *Enzyklopedisches Handbuch der Pädagogik* / herausgegeben von W. Rein (1905). 3. Band, 2. Auflage. Langensalza: Herman Bayer und Söhne [in German].
15. Ingenkamp, K. (1987). „Die experimentelle Pädagogik“ und ihre Herausgeber 1905 und 1906. *Empirische Pädagogik*, 1, 161–170 [in German].
16. Kerschensteiner, G. (1905). *Die Entwicklung der ziehnerischen Begabung*. München [in German].
17. Lay, W. A. (1905). Zum Arbeitsplan. Psychologisch-pädagogische und didaktische Vorschläge von W. A. Lay. *Die Experimentelle Pädagogik. Organ der Arbeitsgemeinschaft für experimentelle Pädagogik mit besonderer Berücksichtigung der experimentellen Didaktik und der Erziehung schwachbegabte und abnormer Kinder*. I. Band, Heft 1/2, 102–113 [in German].
18. Lay, W. A. (1910). *Experimentelle Didaktik. Ihre Grundlegung mit besonderer Rücksicht auf Wille und Tat*. Leipzig [in German].
19. Lay, W. A. (1921). *Tatschule Als natur- und kultur gemäß Schulreform. Zugleich Anklage und Mahnruf*. Verb. Aufl, Osterwiek/Harz [in German].