

Psycho-Pedagogical Experience of Intellectual Education in the Views of Ukrainian and Foreign Pedagogues as the Basis of Modern Neuropedagogy

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Abstract: *It is extremely important to reconsider psycho-pedagogical experience in the problem of intellectual education that is mainly highlighted on the pages of the leading periodical “Sovetskaya Pedagogika”. The research hypothesis is the possibility of using the pedagogical experience of the journal’s co-authors to justify the basic principles of neuropedagogy, which became widespread after its publication had ended. The research aims to identify and generalize the main areas of intellectual education on the pages of the journal based on a holistic retrospective analysis of professional publications and, thus, identify the factual material and theoretical approaches which have formed the basis of modern neuropedagogy. Research methods involve a set of general scientific and psycho-pedagogical methods: systematic search methods (identification, theoretical analysis and systematization of historical-and-pedagogical works and materials of pedagogical periodicals); historical-and-retrospective methods (analysis of the content and characteristics of reflection and solving of problems related to intellectual education on the pages of the journal); comparative methods (comparison of events, phenomena and facts mentioned in the journal, in particular, the views of national and international theorists and practitioners on the problems of intellectual education, which have formed the basis of modern neuropedagogy). In the paper, theoretical generalization and a new approach to solving a topical problem of generalizing the main areas of intellectual education on the pages of the periodical, namely, the problem of intellectual education in the context of developing an idea on the individual’s harmonious development; a comprehensive approach to the problem of intellectual education on the pages of the periodical; the problem of intellectual development as the basis of intellectual education on the pages of the periodical “; promotion of cognitive activity and independence as an effective means of intellectual education; pedagogical views on the problem of intellectual education on the pages of the periodical; foreign experience in promoting intellectual education on the pages of the periodical have been presented. The stages in the history of forming and developing the periodical “Sovetskaya Pedagogika” (1937–1991) have been concretized following the status and subordination. Particular facts, concepts and problems of the prominent educational journal in the context of establishing the ideas of neuropedagogy and neuropsychology have been specified. The significance of pedagogical periodicals as an important source of psycho-pedagogical research has been justified.*

Keywords: *Sovetskaya Pedagogika (periodical); professional-pedagogical periodicals; historical and pedagogical experience; retrospective analysis; foreign experience; stages of development; neuropedagogy; neuropsychology.*

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Introduction

To create the future in modern pedagogy, it is necessary to acquire knowledge of the history of psycho-pedagogical science and be able to analyze it. However, only taking into account all achievements and failures, one can modernize theoretical and methodological principles of the education process.

Soviet pedagogy is part of the history of Ukrainian psycho-pedagogical science. It cannot be eradicated, cancelled or erased from memory, despite its disadvantages, namely, dependence on party doctrine, dissociation with real education issues, the search for an ideal student and teacher without taking into account the interests of the individual, insufficient development of theoretical and methodological principles of education, which were replaced with a generalized progressive experience of teachers. A distinctive feature of Soviet anthropology was a critical attitude towards the so-called “pseudotheories”, including psycholinguistics, neuropsychology, psychology of sex, neurodidactic. However, the pedagogical practice of the Soviet Union did take into account neurophysiological characteristics of the educational process.

Of particular significance are the periodicals as they serve as a particular “treasury” of the sources of the era, a “repository” of a great amount of actual material needed to study the peculiarities of solving specific problems within a certain historical period. Most of these problems were solved only at the turn of the 21st century, when the accumulated factual material was analyzed not only in the context of humanities but also of psychophysiology, medicine, neuropsychology and neuropedagogy.

The Soviet press underwent significant ideological pressure since it was obligatory for psycho-pedagogical research to be based on Communism and Marxism views. Numerous research findings and innovative scientific ideas were not promoted because of their inconsistency with contemporary ideologies or prevailing pedagogical concepts. Yet all these achievements, regardless of how they were evaluated – positively or negatively – possess their unique practical and scientific value, which actualizes the problem of this research.

Therefore, it is extremely important to reconsider psycho-pedagogical experience in the problem of intellectual education that is mainly highlighted on the pages of the leading periodical “Sovetskaya Pedagogika”. Nowadays, this experience can be considered both in terms of recognizing psychological individuality of a person and the specifics of his or her brain.

This monthly scientific and theoretical journal of the Academy of Pedagogical Sciences of the USSR published in Moscow during 1937–1991.

Zilbershtein & Popkov (1959) became the first researchers of pedagogical periodicals. Nowadays, the problems of pedagogical periodicals development are considered by Halaidiuk et al (2018), Loboda (2010a; 2010b), Maksymchuk et al (2018), Puhach (2005; 2008), et al. Of great importance are the publications on the problems of pedagogical periodicals, created by researchers at different stages of developing the historical and pedagogical science. The most valuable among them are “Pedagogicheskaiia bibliografiia.

The periodical “Sovetskaya Pedagogika” has been studied by Rustamova (2009) in her research titled “Vklad uchenykh respublik Srednei Azii i Kazakhstana v razvitie pedagogicheskoi nauki: po materialam zhurnala “Sovetskaia pedagogika”.

Among a few historiographic sources in the context of our research, special attention should be paid to “Bibliografiia statei, opublikovannykh v zhurnale “Pedagogika” (“Sovetskaya Pedagogika”) v 1937–2002” (“Sovetskaya Pedagogika”) during 1937–2002 (Moscow, 2003) and a bibliographical index “Pedahohichna nauka na storinkakh zhurnalu “Sovetskaya Pedagogika” (1937–1991), compiled by Pobirchenko (2010). Different aspects of the problem under study are covered in the works of many scholars (Bakhmat et al., 2019; Behas et al., 2019; Bezliudnyi et al., 2019; Gerasymova et al., 2019; Halaidiuk et al., 2018; Kaletnik et al., 2011; Maksymchuk et al., 2018; Nerubasska & Maksymchuk, 2020; Petrova, 2017; Melnyk et al., 2019; Sitovskiy et al., 2019; Sheremet et al., 2019).

One should also consider the research findings on the problem under study in the context of other problems of psycho-pedagogical science by such scholars as Pobirchenko (2010).

Levinsson and Norlund (2018) have conducted a critical analysis of the modern press in terms of taking into account the brain features in teaching and learning. O. Sukhomlynska (2007) has developed a methodology for studying new pedagogical theories in the historical discourse of the second half of the 20th century. However, the journal “Sovetskaya Pedagogika” has not yet been analyzed for the presence of neuropedagogical and neuropsychological ideas.

Thus, historiographical analysis of the research problem indicates a significant number of scientific works dedicated to the intellectual development of the individual (Bell, 2016). However, there is a lack of holistic and comprehensive studies on theoretical and methodological

principles of intellectual education in the Soviet Union, as reflected on the pages of the periodical “Sovetskaya Pedagogika”. Besides, the achievements presented on the pages of the journal need to be considered in the light of new scientific paradigms at the intersection of socioeconomic and natural sciences.

The relevance of this research is added by the fact that the limits, subject and prospects of neuropsychology and neuropedagogy are still widely discussed by scholars. Given the large number of neuropsychological studies, academic psychology risks losing a particular subject of study (Jäncke & Petermann, 2010). It is well-known that neurosciences in education contribute to its improvement and, at the same time, create some problems due to the differences in the categorical apparatus and the impossibility of conducting research only by pedagogical methods. The term “neuropedagogy” is rarely used in Western European scientific discourse. The neuropsychological approach dominates here. However, the so-called “neuroscience” (German “Neurowissenschaft”) has become key in addressing the actual pedagogical issues of management, coaching, counselling and training (Voigt, 2019, p. 339). These issues, however, were already covered under other categories at a time when the “neuro” had not yet penetrated the humanitarian sphere.

The research aims to identify and generalize the main areas of intellectual education on the pages of the journal based on a holistic retrospective analysis of professional publications and, thus, identify the factual material and theoretical approaches which have formed the basis of modern neuropedagogy.

The method of extrapolating the problems of intellectual education

Research methods involve a set of general scientific and psychopedagogical methods: systematic search methods (identification, theoretical analysis and systematization of psycho-pedagogical works and materials of pedagogical periodicals); historical-and-retrospective methods (analysis of the content and characteristics of reflection and solving of problems related to intellectual education on the pages of “Sovetskaya Pedagogika” (1937–1991); comparative methods (comparison of events, phenomena and facts mentioned in the journal, in particular, the views of Ukrainian and foreign theorists and practitioners on the problems of intellectual education). They were employed to achieve the research aim, realize research objectives and verify the research hypothesis.

Chronological boundaries of the research stretch over the years from 1937 to 1991. The lower chronological boundary starts in 1937, that is the year of the foundation of the journal “Sovetskaya Pedagogika” as the body of the People’s Commissariat of the Russian SFSR. The upper chronological boundary reaches 1991 as the journal has been published under the new name “Pedagogika” since 1992.

The sources of the research include publications on intellectual education on the pages of the journal “Sovetskaya Pedagogika” (1937–1991), monographs and scientific historical-and-pedagogical works, dissertations and publications on topics related to the problem under study.

The research also employed the collections of Vernadsky National Library of Ukraine, V. O. Sukhomlynskyi State Scientific and Pedagogical Library of the National Academy of Pedagogical Sciences of Ukraine, the National Parliamentary Library in Kyiv.

The method of extrapolating the problems of intellectual education on the pages of the journal “Sovetskaya Pedagogika” to theoretical principles of modern neuropedagogy and neuropsychology was employed to compare and draw theoretical analogies.

In the first part on “The periodical “Sovetskaya Pedagogika” during 1937–1991 in the Context of the General Historical and Pedagogical Process”, theoretical and methodological principles of the research have been analyzed; the process of forming and developing the periodical “Sovetskaya Pedagogika” during 1937–1991 as the leading Soviet pedagogical journal has been justified. In the second part on “Topical Problems of Intellectual Education in the Context of Forming Pedagogy on the Pages of the Periodical “Sovetskaya Pedagogika” during 1937–1991)”, the problem of intellectual education in the context of developing an idea of the individual’s harmonious development has been characterized; a comprehensive approach to the problem of intellectual education on the pages of the periodical “Sovetskaya Pedagogika” has been analyzed; the problem of intellectual development as the basis of intellectual education on the pages of the periodical “Sovetskaya Pedagogika” has been justified; the process of promoting cognitive activity and independence as an effective means of intellectual education has been revealed. In the third part on “The Problem of Intellectual Education through the Prism of Ukrainian and Foreign Pedagogy on the Pages of the Leading Soviet Pedagogical Periodical”, the peculiarities of pedagogical views on the problem of intellectual education on the pages of the leading pedagogical periodical have

been characterized; foreign experience in promoting intellectual education in the periodical “Sovetskaya Pedagogika” has been specified.

The periodical “Sovetskaya Pedagogika” in the Context of the General Psycho-Pedagogical Process

An important aspect of determining theoretical and methodological principles of the research has become clarification of the concept of “intellectual education”, its formation and development at different historical stages to comprehend its essence. Based on the conducted analysis, it can be stated that the problem of intellectual education has been considered at all stages of forming pedagogy as a science. Therefore, the essence and the content of the concept have undergone some changes under the influence of social requirements. However, only in the 1990s a new period in the anthropology development was called the “Century of the Brain”, and didactic began to rely directly on the achievements of neurology.

It has been found that psycho-pedagogical press as an important source of pedagogical data on the problem of intellectual education at different levels of education development was the focus of both psycho-pedagogical research since it accumulated significant actual material that is of scientific and social value. The Soviet press underwent significant ideological pressure since it was obligatory for psycho-pedagogical research to be based on Communism and Marxism views rather than neurobiological patterns. Hence, numerous research findings and innovative scientific ideas were not promoted because of their inconsistency with contemporary ideologies or prevailing pedagogical concepts. Yet all these achievements, regardless of how they were evaluated – positively or negatively – possess their unique practical and scientific value, which actualizes the problem of this research.

It should be noted that the problem of intellectual education has gained significant attention on the pages of the leading pedagogical periodical “Sovetskaya Pedagogika” since the individual in the Soviet school should have been intelligent enough to be able to solve any task at a high scientific level. However, intellectual education in the Soviet period played not a leading but important role in preparing students for adult life, professional activity, forming moral and aesthetic values, that is, developing a harmonious personality able to effectively perform professional duties. The main difference between theories of brain development in the context of pedagogy was the movement from social to personal, not vice versa.

The periodical “Sovetskaya Pedagogika” was characterized by thematic diversity, controversy and discussion, justification of materials, high scientific, theoretical and methodical level of publications.

Even though modern psycho-pedagogical studies criticize Soviet pedagogy for being ideologized and dependent on sociopolitical circumstances, the periodical “Sovetskaya Pedagogika”, despite a constant party pressure, ideological colouring and various directives, was one of the main factors in forming the content of education, organization and methodology of teaching and learning, as well as determined the main trends in developing sociopolitical, pedagogical and polytechnical orientation of education.

To study the theoretical and methodological principles of the research, the theoretical framework of the research has been analyzed based on three main groups of sources:

The first group of sources includes the researches in psycho-pedagogical periodicals (Loboda, 2010c; Pugach, 2008; Zilbershtein & Popkov, 1959).

The second group of sources implies researching the periodical “Sovetskaya Pedagogika”: a bibliographic edition “Bibliografiia statei, opublikovannykh v zhurnale “Pedagogika” (“Sovetskaya Pedagogika”) v 1937–2002” (“Sovetskaya Pedagogika”) during 1937–2002), prepared in 2003 to the 60th anniversary of the Russian Academy of Education; a bibliographic index “Pedagogichna nauka na storinkakh zhurnala “Sovetskaya Pedagogika” (1937–1991)”.

The third group of sources consists of the publications on the pages of the periodical “Sovetskaya Pedagogika”, which directly or indirectly covered the problems relevant to a neuropedagogical approach. According to this approach to developing the problem of intellectual education, five main thematic groups of the publications on the pages of the periodical “Sovetskaya Pedagogika” have been singled out:

- the problem of intellectual education in the context of developing an idea on the individual’s harmonious development;
- a comprehensive approach to the problem of intellectual education on the pages of the periodical “Sovetskaya Pedagogika”;
- the problem of intellectual development as the basis of intellectual education on the pages of the periodical “Sovetskaya Pedagogika” and promotion of cognitive activity and independence as an effective means of intellectual education;

- pedagogical views on the problem of intellectual education on the pages of the periodical “Sovetskaya Pedagogika”;
- foreign experience in promoting intellectual education on the pages of the periodical “Sovetskaya Pedagogika”.

The conducted analysis has allowed distinguishing several stages in the history of forming and developing the periodical “Sovetskaya Pedagogika” following the status and subordination: 1) 1937–1943 – the body of the People’s Commissariat of the RSFSR; 2) 1944–1966 – the body of the Academy of Pedagogical Sciences of the RSFSR; 3) 1967–1991 – the body of the Academy of Pedagogical Sciences of the USSR. Simultaneously, each of these stages is marked with significant changes in the priority tasks of the pedagogical periodical, among which, undoubtedly, creating a Soviet pedagogical science.

The publications in “Sovetskaya Pedagogika” covered a wide range of pedagogical problems, were characterized by a high level of validity and reliability and associated with the education process. Therefore, it is relevant to conduct solid researches on both the theory of education and the history of pedagogy.

It must be noted that 52.1% of the authors used objective scientific arguments, whereas 16.5% of them applied statistical data; their inferences were supported with quotations in 57.7% of the publications, yet materials without previous theoretical justification were found in 34.2% of the papers. The factual and statistical material accumulated in that period now acquires new significance since it can be analyzed taking into account modern approaches, namely, neurocybernetics, neuropsychology, psychology of sex, psychology of children with special educational needs.

Besides, the most priority were the papers on the theory of pedagogy (50.5% of the total number), the history of pedagogy (24.9%), theoretical and methodological principles of education (12.6%), while only 1.4% of the papers were dedicated to intellectual education that indicates little attention paid to this problem. However, the analyzed literary sources on the research problem have allowed finding partial material in the papers dedicated to the study on related problems.

Topical Problems of Intellectual Education in the Context of Developing Psycho-Pedagogical Science on the Pages of the Periodical “Sovetskaya Pedagogika”

The analysis of the publications on the pages of the periodical “Sovetskaya Pedagogika” (1937–1991) shows a considerable interest of Soviet theorists and practitioners in the problem of intellectual education. Among them, we have singled out those that covered the most topical problems of contemporary pedagogy, directly or indirectly related to the problem of intellectual education.

It must be noted that the problem of intellectual education in Soviet pedagogical theory and practice was considered primarily in the context of developing an idea on the individual’s harmonious development. The range of issues the state and society were facing reflected on education since top priority was to educate a harmonious individual able to solve complicated tasks. Therefore, they used a comprehensive approach that combined different types of education in one category – the individual’s harmonious development.

In “a pure form”, the essence and the content of neuropedagogy on the pages of the periodical “Sovetskaya Pedagogika” were paid insignificant attention, taking into account a prevailing ideological and moral orientation of pedagogy during the study period. In most cases, intellectual education was considered in complex with other types of education (communist, moral, aesthetic, labour). Its essence was determined based on the concept of “the individual’s harmonious development”, which was almost considered to be an aspect of state policy in education.

It has been found that the party’s political influence on the education process was recognized as leading in developing the system of intellectual education. In the context of the mentioned above, the papers on education and, in particular, intellectual education published in the periodical “Sovetskaya Pedagogika” were extremely ideologized.

The main objectives of contemporary education, which set priorities in forms and methods for forming harmoniously developed personality, were determined by the needs of economic, political and cultural development of society rather than the needs of personal development. Thus, Soviet education was precisely based on the state interests that significantly influenced all aspects of public life, including the concept of personal development.

Based on the analysis of the sources, the problem of forming harmoniously developed personality emerged from a general concept of a comprehensive approach to education in the Soviet period, whose essence implied educational impact on the student in collective terms, taking into account their characteristics, without reducing the identity to their totality (Filonov, 1978; Monoszon, 1987). This concept directly correlates with the problem of harmonious development of the right (emotional) and left (logical) hemispheres of the brain, as well as with the neuropsychological theory of the human psyche's integrity.

Having analyzed the publications on the pages of the periodical "Sovetskaya Pedagogika", we outlined the following approaches to intellectual education, which are the components of a comprehensive approach to education: a system- and activity-based approach, a phenomenological approach, a functional approach, a sociologizing approach, a biologizing approach. Today, personal phenomenology (personal mental modality), functions, capabilities of the human brain and their biological basis are the direct subject of neuropsychology.

Several important aspects of a comprehensive approach to intellectual education, discussed on the pages of the periodical "Sovetskaya Pedagogika", have been specified. They are the aim (goals) of intellectual education, the cohesion of intellectual education, learning and development, the interrelation between intellectual education and other types of the education process; the peculiarities of intellectual education in different types of educational institutions; the problem of a differentiated approach to intellectual education (an individual approach in education; taking into account age and individual characteristics of the students); a combination of biological and social aspects in intellectual education. It must be noted that a rather negative aspect was the reduction of biological and individual psychophysiological factors.

It has been revealed that in the context of a comprehensive approach to intellectual education it is important to consider the problems of intellectual development as the basis of intellectual education on the pages of the periodical "Sovetskaya Pedagogika", namely, various aspects of the thinking process and its development (types of thinking, peculiarities of thinking that complicate learning and appropriate ways to overcome them), peculiarities of intellectual abilities, the problem of forming skills and abilities of intellectual activity, the ways to develop thinking, etc.

As for other important aspects of intellectual education highlighted on the pages of the periodical “Sovetskaya Pedagogika”, the following ones related to neuropedagogy and neuropsychology should be distinguished: psychodiagnostics and psychocortication aimed at improving the students’ progress and intellectual development (Gilbukh & Rychik, 1976; Gurevich et al, 1989); forming the methods of intellectual activity and their classification, Kabanova-Meller (1975); communicating (communicative connections) as a factor of intellectual development effectiveness, Bodalev (1990); an emotional component as an important condition for developing the students’ creative skills and forming their interest in learning, Tkachev (1978).

As shown by the analysis of the publications on the pages of “Sovetskaya Pedagogika”, one of the important trends in enhancing cognitive activity aimed at intellectual development of the individual is the promotion of cognitive activity and independence as an effective means of intellectual education. Such scholars as Kraievskiy et al. (1981), Kraievskiy (1984), Mochalova (1981), Palamarchuk & Palamarchuk (1979), Vilkeev & Gabidullin (1979) et al. analyzed various aspects of the problem under study: a mechanism of intellectual education as a set of methods and tools aimed at target influence on student personality; a comprehensive study on the application of teaching methods (explanation, comparison, problem-based learning, etc.); tools (means) of educational influence (educational cognitive tasks and calculation tasks, word as a symbol, evaluation, etc.).

The above-mentioned generalizations of the problems in the journal “Sovetskaya Pedagogika” and the key areas of modern neuropedagogy can be compared in the form of Table 1 (it contains analogies having common factual and ontological nature).

Tab. 1. Generalizations of the problems in the journal “Sovetskaya Pedagogika” and the key areas of modern neuropedagogy

The problems of the journal “Sovetskaya Pedagogika”	The problems of neuropedagogy
Psychodiagnostics and psychocorrection	Conducting neurodiagnostics and establishing new neural connections
Taking into account individual features of temperament, perception and symptom-related complexes of character	Identifying and taking into account individual neuropsychological and neurophysiological features (perceptual-and-sensory and cognitive features; the lateral profile of the pupil’s brain)

Involving pupils with special needs into the educational process and society	Inclusion of pupils with the characteristics of psychophysical development
Preventing chronic and occupational diseases of participants in the pedagogical process	Identifying and correcting didactogenic diseases and deviations
Activating intellectual activity (problem-based learning, problem-based approach)	Neurodidactic assessment of the influence of educational conditions and stressors
	Using functional asymmetry of the brain, activating groups of neurons

Source: Authors' own conception

There are some observations on correctional pedagogy, rehabilitation training, recreation and speech therapy on the pages of the journal under study. In the Soviet Union, however, these areas of knowledge were clearly divided into pedagogical and non-pedagogical (clinical psychology, medicine, physical therapy). The main problem was not so much the non-recognition of neurodidactics, as bringing it beyond the limits of pedagogy. Under the conditions of scientific holism (a holistic approach), neuropedagogy has contributed to eliminating the barrier between the natural (biological), the human universal (social and cultural) and the personal (psychological). The issues which are now related to neurodidactic were studied on the premises of segregated institutions, namely, clinics, institutes of neurosurgery and practical psychology. Therefore, it could not appear on the pages of humanitarian publications in its “pure form”.

Swedish specialists in neurodidactic state that the previous pedagogical experience of Western Europe used to largely include neuropedagogical observations and generalizations. Thus, the medical aspects of school education date back to the 18th century, although they became the subject of special neuropedagogical research only in the 1970s (Bengtsson, 2018, p. 2).

The Problem of Intellectual Education through the Prism of Ukrainian and Foreign Pedagogy and Psychology on the Pages of the Leading Soviet Pedagogical Periodical

As evidenced by the conducted analysis, a significant role belonged to the publications by well-known Ukrainian and foreign pedagogues at all stages of forming and developing the periodical “Sovetskaya Pedagogika”.

It has been found that the problem of intellectual education on the pages of “Sovetskaya Pedagogika” was covered mainly through the prism of the psycho-pedagogical heritage of Ukrainian and foreign pedagogues and psychologists, such as Korolev (1960), Mikhailova (1983), Smirnov, (1960), Sukhomlynskyi (2003; 2007), Zankov (1969) et al. The studies have numerous neuropsychological and pedagogical observations. In the 19th century, Ushynskyi (2020) defined the neuropsychological principles of didactics based on the “soul – body with nerves” relationship (p. 235). At the same time, such aspects on the pages of the analyzed journal were ignored.

Based on the analysis of the periodical’s content, it can be concluded that there was a lively discussion of pedagogical concepts, including intellectual education among both well-known and little-known pedagogues and psychologists. Of great importance are the publications by Smirnov (1939), Klarin & Leiko (1984), Komarova (1985). Despite an incomplete justification of forming theoretical principles of intellectual education in the outlined publications, they allowed, to some extent, determining the basic principles of intellectual education. Moreover, the journal discussed issues of developmental pedagogy and psychology and methods of their study, which fully corresponds to the main object of neuropedagogy (age dynamics of the brain and psyche and its impact on the educational process).

Of great interest to our research is the study of foreign experience in promoting intellectual education, found on the pages of the leading periodical “Sovetskaya Pedagogika”.

The problems of pedagogy were studied based on the experience of the pedagogues and psychologists from Poland, Bulgaria, German Democratic Republic, as well as those countries following similar ideological principles and scientific basis of the works of Marxist educators from the capitalist countries.

As evidenced by the analysis, the Bulgarian approach to intellectual education was characterized by profound methodological principles.

Moreover, they implemented a special course on “Intellectual Activity Development”. The main attention was paid to the students’ mastering different techniques of intellectual activity, the system of intellectual operations, Kasvin (1984).

According to several publications on the pages of the periodical “Sovetskaya Pedagogika”, it can be concluded that the education systems of Poland, Banakh (1984), “Sovremennye problemy, tseli i zadachi polskogo prosveshcheniia” (Modern Problems, Goals and Objectives of Polish Education)) and the German Democratic Republic were less oriented towards intellectual education, Noiner (1969), “O novykh uchebnykh planakh i programmakh shkoly GDR” (On New Syllabi and Programmes at GDR School)).

In general, socialist pedagogy paid some attention to the need to solve methodological problems of intellectual education, including recognizing the role of psychology, yet intellectual education was subordinated to the need to disseminate communist ideology and was considered within the concept of the individual’s harmonious development.

The analysis of pedagogical achievements in intellectual education in France is presented by two approaches, namely, pedagogical views on intellectual education, based on Marxist ideology, represented by the works of Sekle-Riu (1960) et al.; the concept of “bourgeois” educators.

As the analysis shows, the study of foreign experience was mainly based on criticism of intellectual education organization in capitalist countries. Yet the most perspective pedagogical researches were considered those that supported socialist ideology. The most vivid example of promoting “bourgeois” concepts of intellectual education can be the United States, whose education system greatly influenced education systems of different countries in the world. These reasons make it difficult to find categories and terms on the pages of the journal that would prove the close proximity of pedagogy and neurophysiology.

In the publications dedicated to studying foreign experience in socialist and capitalist countries, the works of Marxist educators in England and France mostly criticized the biologizing concept of education and emphasized on the effectiveness of intellectual development because of its educational impact on the students.

Indeed, socialist pedagogy considered the need to solve methodological problems of intellectual education (including the recognition of psychology). Simultaneously, intellectual education was subordinated to

the needs of communist ideology and was viewed through the concept of the individual's harmonious development.

Capitalist pedagogy preferred the biological concept of education, even though humanistic ideas were greatly influencing the concept of education as a whole. It must be noted that since the 1980s, the publications in "Sovetskaya Pedagogika" have indicated a decline in the biologizing concept of education due to an increasing influence of humanistic ideas combined with an objective need to ensure high quality of general education, manifested in promoting humanistic and optimistic approaches. In the journal, biological accents were qualified as biologizing and criticized as unscientific.

Also, on the pages of "Sovetskaya Pedagogika" one can find critical analysis of various foreign theories and concepts of intellectual education in the context of Soviet pedagogical views: the problem of education individualization as the most effective means of the individual's intellectual development, the cognitive concept of Western social psychology, technological theory, etc.

Determining and generalizing the main trends in intellectual education on the pages of the periodical "Sovetskaya Pedagogika"

In the paper, theoretical generalization and a new approach to solving a topical problem of determining and generalizing the main trends in intellectual education on the pages of the periodical "Sovetskaya Pedagogika" during 1937–1991 have been presented. Such a historical discourse is currently relevant for clarifying the origins of neuroscience. Becker (2014) claims that the objectification of links between neuroscience and pedagogy has gained popularity in the last ten years. However, it is worth studying the previous experience as well (since the 1990s). It will help identify the trends in development and the strong methodological and factual basis of interaction between these sciences, Becker (2014).

It has been found that an important precursor of the neuropsychological research on the problem of intellectual education is pedagogical press since it accumulates knowledge of pedagogical phenomena, trends, pedagogical theories and covers new pedagogical ideas, professional achievements. Simultaneously, it is a valuable source of information for practising teachers. To a large extent, pedagogical press highlights pedagogical concepts and contributes to their presentation and approbation without taking into account reflection of actual information.

The problem of intellectual education has been significantly emphasized on the pages of the periodical “Sovetskaya Pedagogika” – a monthly scientific and theoretical journal of the Academy of Pedagogical Sciences of the USSR, published in Moscow during 1937–1991. During this time, topical aspects of psycho-pedagogical science, namely, education, teaching and learning, methodology, development of Ukrainian and foreign education systems have been highlighted on its pages.

Based on the analysis of the bibliography, three groups of sources have been singled out: the researches in pedagogical periodicals; the process of researching the periodical “Sovetskaya Pedagogika”; the publications on the pages of the periodical “Sovetskaya Pedagogika”, which directly or indirectly covered the problems of intellectual education (the problem of intellectual education in the context of developing an idea on the individual’s harmonious development; a comprehensive approach to the problem of intellectual education on the pages of the periodical “Sovetskaya Pedagogika”, the problem of intellectual development as the basis of intellectual education on the pages of the periodical “Sovetskaya Pedagogika”; the promotion of cognitive activity and independence as an effective means of intellectual education; pedagogical views on the problem of intellectual education on the pages of the periodical “Sovetskaya Pedagogika”; foreign experience in promoting intellectual education on the pages of the periodical “Sovetskaya Pedagogika”).

Thus, the analysis of theoretical and methodological principles of the research proves that the problem of intellectual education on the pages of the periodical “Sovetskaya Pedagogika” has a profound source foundation. However, neuropedagogical ideas were hidden or deliberately ignored.

The history of forming and developing the periodical “Sovetskaya Pedagogika” in the context of Soviet pedagogy has been characterized. The analysis has allowed specifying several stages in its history following the status and subordination: 1) 1937–1943 – the body of the People’s Commissariat of the RSFSR; 2) 1944–1966 – the body of the Academy of Pedagogical Sciences of the RSFSR; 3) 1967–1991 – the body of the Academy of Pedagogical Sciences of the USSR. Simultaneously, each of these stages is marked with significant changes in the priority tasks of the pedagogical periodical, among which, undoubtedly, creating a Soviet pedagogical science.

It has been clarified that since its foundation the periodical “Sovetskaya Pedagogika” has become an authoritative scientific edition for

the psycho-pedagogical community (one can trace historical and social preconditions for developing neuropedagogy as a science on the pages of the periodical) and the main “messenger” of the latest ideas in the system of educational, cultural and social processes.

The generalization of the history and functioning of the periodical “Sovetskaya Pedagogika” has allowed revealing the range of its peculiarities under the conditions of Soviet pedagogy and psychology. First of all, the process of developing the Soviet press was mainly based on the need to promote totalitarian ideology and disseminate Marxism-Leninism. Despite education ideologization, pedagogy gradually developed as an interdisciplinary science, the scientific level of publications was strengthened, theoretical and methodological principles of neuropedagogy were established. Psychological principles of pedagogy were eventually considered, initially rejected because of common theoretical principles with pedology (pseudoscience in pedagogy). Besides, the views of foreign scholars on pedagogy, including in bourgeois countries, were taken into account.

The main trends in intellectual education in the context of forming neuropedagogy on the pages of the periodical “Sovetskaya Pedagogika” have been determined. First, the problem of intellectual education was mainly considered in the context of developing an idea on the individual’s harmonious development, since it was considered one of the top priority objectives within the state policy in education. According to the analysis of the publications in “Sovetskaya Pedagogika”, the comprehensive and harmonious development of the individual in the context of intellectual education included the following trends: vocational orientation and labour training; the combination of labour and education; physical labour intellectualization; ideological training and scientific outlook development; the unity of intellectual and physical development of the individual due to intellectual training and physical education; the unity of intellectual, volitional and emotional development; participation in all types of human activities, which would maximize individuality development; provision of education based on communist principles and related to real life.

Secondly, the problem of forming harmoniously developed personality emerged from a general concept of a comprehensive approach to education in the Soviet period, whose essence implied educational impact on the student in collective terms, taking into account their characteristics, without reducing the identity to their totality. Among other important aspects of a comprehensive approach to intellectual education, discussed on

the pages of the periodical “Sovetskaya Pedagogika” are the aim (goals) of intellectual education, the cohesion of intellectual education, learning and development, the interrelation between intellectual education and other types of the education process; the peculiarities of intellectual education in different educational institutions; the problem of a differentiated approach to intellectual education (an individual approach in education; taking into account age and individual characteristics of the students); a combination of biological and social aspects in intellectual education, etc.

Thirdly, in the context of a comprehensive approach to intellectual education, it is important to consider the problems which are currently the subject of neuropedagogy, namely, various aspects of the thinking process and its development (types of thinking, peculiarities of thinking that complicate learning and appropriate ways to overcome them), peculiarities of intellectual abilities, the problem of forming skills and abilities of intellectual activity, the ways to develop thinking, psychodiagnostics and psychocortication aimed at improving the students’ progress and intellectual development, the process of forming the methods of intellectual activity and their classification, communication as a factor of intellectual development effectiveness, an emotional component as an important condition for developing the students’ creative skills and forming their interest in learning.

The next topical problem, which was reflected on the pages of the periodical “Sovetskaya Pedagogika” is the promotion of cognitive activity and independence as an effective means of intellectual education. On the pages of the periodical, the outlined aspect of the problem is analyzed in the following areas: a mechanism of intellectual education as a set of methods and tools aimed at target influence on student personality; a comprehensive study on the application of teaching methods (explanation, comparison, problem-based learning, etc.); tools (means) of educational influence (educational cognitive tasks and calculation tasks, word as a symbol, evaluation). Here one can observe terms that are fully and in the same sense included in the toolset of neuropsychology: stimulation, symbol, cognition, cognitive activity.

The peculiarities of pedagogical views on the problem of intellectual education on the pages of the leading pedagogical journal have been justified. As evidenced by the conducted analysis, a significant role belonged to the publications by well-known Ukrainian and foreign pedagogues at all stages of forming and developing the periodical “Sovetskaya Pedagogika”. It has been found that the problem of intellectual education on the pages of

“Sovetskaya Pedagogika” was covered mainly through the prism of the pedagogical heritage of Ukrainian and foreign pedagogues, such as Smirnov (1960), Sukhomlynskyi (2003; 2007), Korolev (1960), Mikhailova (1983), Zankov (1969).

It has been concluded that there was a lively discussion of pedagogical concepts, including intellectual education among both well-known and little-known pedagogues. Of great importance are the publications by Smirnov (1939), et al. Despite an incomplete justification of forming theoretical principles of intellectual education in the outlined publications, they allowed, to some extent, determining the basic principles of future neuropedagogy.

Foreign experience in organizing intellectual education in the periodical “Sovetskaya Pedagogika” has been revealed. The analysis of the publications covering foreign experience in organizing intellectual education in the periodical “Sovetskaya Pedagogika” has allowed distinguishing the main thematic groups: critical overview of the education concepts in the USA (Borovikova & Panasenko, 1987), criticism of the biologizing concept of intellectual development in the USA and England (Gilbukh, 1976), analysis of the concept of education in France, which embodied conservatism (Dzhurinskii, 1987), overview of the prevailing pedagogical concepts in the USA in the 1980s (Dmitriev, 1986), analysis of the concept of comprehensive intellectual development and the aim of intellectual education in socialist countries (Kasvin, 1984), critical analysis of the theory of errors and other biologizing concepts in the West (Kuzminskaia, 1989), justification of the changes in education and approaches to intellectual education abroad (Malkova, 1990), overview of positive aspects of education individualization in the USA and Germany and its simultaneous criticism based on ideological positions, Filipovskii (1979), consideration of the possibility of using the theory of conflicts (USA) in intellectual education, criticism of behaviouristic and biologizing approaches to education in France and England (Salimova, 1977; 1978), analysis of the content of publications by French pedagogues on the pages of the journal “Shliakh osvity” (The Path of Education) (Sukhomlynska, 2003; 2007) et al. Such criticism rejected biological and neurological approaches and, at the same time, took them into account using different categories since the actual experience showed the need to consider natural and acquired individual psychophysical features.

A distinctive feature of the considered publications was a positive attitude toward pedagogical ideas in socialist countries or those expressed by

Marxist educators abroad, while a negative attitude was observed mostly toward Western ideological positions.

It has been stated that the main topic of publications on foreign experience in organizing intellectual education was the criticism of the biologizing concept of education as “antiscientific” and preferring the sociologizing concept. However, since the 1980s, the publications in “Sovetskaya Pedagogika” have indicated a decline in the biologizing concept of education due to an increasing influence of humanistic ideas combined with an objective need to ensure high quality of general education, manifested in promoting humanistic and optimistic approaches.

Thus, progressive ideas of educators who published their materials on the pages of the periodical “Sovetskaya Pedagogika” are still relevant nowadays, given modern psycho-pedagogical achievements. The process of studying pedagogical heritage, innovative discoveries of contemporary scholars forms the basis for reforming and developing a modern system of education. The periodical “Sovetskaya Pedagogika” remains a leading scientific and theoretical edition, which allows forming a pedagogical worldview, impartially highlights the achievements of pedagogy and education.

The scientific value of the obtained results lies in the fact that:

- for the first time, the basics and origins of neuropedagogy as a discipline about the problems of intellectual education (the problem of intellectual education in the context of elaborating the idea about harmonious development of personality; a complex approach to the problems of intellectual education on the pages of the journal “Sovetskaya Pedagogika”; the problem of personality’s intellectual development as the basis of intellectual education on the pages of the journal “Sovetskaya Pedagogika”; stimulating cognitive activity and independence as an effective way of intellectual education; pedagogical thought and problems of intellectual education on the pages of the journal “Sovetskaya Pedagogika”) and foreign experience of intellectual education justified and published in the journal “Sovetskaya Pedagogika” (1937–1991) have been identified and summarized based on a comprehensive retrospective analysis of professional publications and description of characteristics of psycho-pedagogical thought;

- the stages in the history of establishment and development of the journal “Sovetskaya Pedagogika” (1937–1991) have been specified according to the status and subordination; certain facts from the history of the leading

educational journal in the context of developing Soviet pedagogy have been clarified;

– the importance of psycho-pedagogical periodicals as an important source of historical and pedagogical studies and a means of predicting the development of pedagogy has been justified.

The little-known publications of the then existing pedagogical periodical, which expanded the modern knowledge about the peculiarities of solving the problem of intellectual education in publications on the pages of the journal “Sovetskaya Pedagogika” (1937–1991) have been introduced to the scientific community. The research hypothesis was confirmed: despite the ban on the elaboration and publication of neuropsychological and neuropedagogical discourse in the journal “Sovetskaya Pedagogika”, there are numerous observations and significant factual material on the interaction between neurological disciplines and the theory of teaching and learning.

Facts, theoretical views and conclusions of the research can be used to solving scientific and practical problems at the present stage of developing psycho-pedagogical science. The systematized and generalized materials of the publications of the journal “Sovetskaya Pedagogika” (1937–1991) can become the basis for further research on the history, history of pedagogy and textbooks and manuals on the history of pedagogy. Besides, they can help to expand, supplement and update the content of the course “The History of Pedagogy”. The obtained results can become a material for studying the history of neuropedagogy and its correlations with classical pedagogical theories.

The conducted research has not revealed all aspects of the problem. The prospects for further researches imply studying neuropedagogical problems of intellectual education on the pages of other psycho-pedagogical editions, as well as topical problems of theory and practice of education in the history of Ukrainian and foreign pedagogy, etc.

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