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THE "MAN-LABOUR" SYSTEM AS THE BASIS FOR INTERDISCIPLINARITY OF PEDAGOGICAL SCIENCE

"The labour of hands brought a man to his current position in nature ...

This spiritual world is built on
The experience and material achievements of working hands".

Tadeush Vatslav Novatskiy

ABSTRACT

We consider the philosophical and pedagogical aspects of "man-labour" system and justify its interdisciplinarity. On the basis of results of scientific researches the need for an objective systematization and specialization in pedagogy is emphasized. Four areas of education sciences systematization, proposed by Z. Vyatrovsky are analyzed. Particular attention is paid to the problems of the dialectical relationship of labour pedagogy, labour psychology and vocational pedagogy in globalization and integration processes. In this context prognostic significance of research aimed at dynamic development of "man-labour" system in the information and technology community is revealed.

Key words: system, man, labour, pedagogy, psychology, vocational education, interdisciplinarity.

INTRODUCTION

Among many systems known from ancient times to the present day, the "man-man" system is the most life-giving, well-known, prognostic, dynamic and effective. At various times as well as different stages a good few of systems were born, strengthened, developed and finally disappeared (died). Some of them revived, or were born again for the second or even for the third time; they functioned again, enriching man, his family and continuing the traditions of his nation, his homeland.

Quite different reasons underlay at the heart of these changes, first of all such as universal, spiritual, moral, social economic and cultural, environmental, administrative and many others. They can not be immediately counted and comprehended. They yet reflected each historic epoch and its features.

"The "man-labour" system as the main river and source of life became more and more full-flowing over time, creating new systems and subsystems, affecting the development of man's mind, his inner world, and certainly the outlook as "system of views on the objective world and man's place in it, his attitude to reality, to himself, and main life positions of





people, their beliefs, ideals principles of perception and activities, value orientation, caused by these ideas" (Shapar, 2005). As is well-known, the outlook is formed in the process and as a result of generalization of natural, scientific, social, historical, philosophical, technical knowledge, as well as due to the effect of the immediate living conditions. It is transmitted from generation to generation with people's experience, their ethnical traditions and experience of creative work.

THE AIM OF THE STUDY

The article reviews philosophical and pedagogical aspects of "man-labour" system and its interdisciplinarity.

THEORETICAL FRAMEWORK AND RESEARCH METHODS

In the context of the philosophical approaches we can turn to the conclusions grounded by an outstanding Ukrainian philosopher V. Shynkaruk. "At all stages of the history mankind created summarizing views of the world and man, its vital activity, put forward the ideals and shaped the vision of the future that was a guiding line in its life. Continuous development of production, culture, human needs, expansion of the latest spheres of nature involved in human activities, the improvement of both activity and man have been actualizing the learning of objective laws of the development and transformation of the world, the formulation of the basic principles of the scientific approach to the world and man, formation of ideology as a system of generalized views of the world, the historical destiny of man and mankind" (Shynkaruk, 2012, 167). The key idea of the thoughts is that labour created and keeps creating both the very man and human civilization.

Category of labour inspired by thousands of beams as they were inspired by man is connected with all the areas of human life and society, the development of education, science and culture. If we put the system "man-labour" in the center of this extremely important issue as its core, we are offered a wide range of organic relations between many scientific fields. Due to this fact we can comprehend the complexity and interdependence of relations among which we find issues of labor rights with philosophy, sociology, psychology, pedagogy, economics, physiology, ergonomics, culture etc. Under such conditions the formation of interconnected scientific processes peculiar to a particular epoch acquires its regularity.

That is why this particular system has always had great attraction: it is studied, designed, modelled and prognosticated by representatives of various branches of scientific knowledge such as philosophers and sociologists, economists and demographers, educators and psychologists, artists and culturist, doctors and managers. It has always been the driving force of the spiritual, moral, ethical, cultural and ultimately social and economic development of every nation and each state.

In these complex processes science plays the crucial role as a distinct sphere of human activity. According to S. Krymskiy this axiom is aimed at "the production and knowledge systematization of life patterns by means of theoretical reasoning and empirical testing and validation of cognitive outcomes to reveal their objective content (validity, reliability, intersubjectivity)" (Encyclopedic Dictionary of Philosophy, 2002, 410–411).

As noted by V. Kremen and V. Ilyin, one can reveal the transmission of means and methods of knowledge from one sphere to another in both interdisciplinary and disciplinary interactions. In each of these situations, the transfer of methods implies the identification of subject area's identities that are being investigated. The difference between interdisciplinary and disciplinary research lies in the scope of synthesis and bases that direct transfer of methods. Distant and exclusively specific subject areas seem to connect with each other within interdisciplinary researches.





As a result in the modern science and culture philosophers distinguish several synergy parallel layers of its being located to the extent of increase of abstraction level: subdisciplinary is everyday consciousness of routine activities; disciplinary is processes of individual creativity and the development of disciplinary knowledge and research objects; interdisciplinary is processes of interdisciplinary communication and transfer of knowledge in dialogues of disciplines including pedagogy and education, during decision-making; transdisciplinary is processes of self-organization and operation of large interdisciplinary projects, interdisciplinary communication languages, origins of interdisciplinary invariants, collective intelligence, network thinking; overdisciplinary is the creative process, the formation of philosophy, the development of science and culture. Communicative practices in each of these layers have special traditions of use that are completely scientific and methodologically developed at the disciplinary level (Kremen, Ilyin, 2012, 27–28).

Taking into consideration the methodological importance of pedagogical sciences systematization, we appeal to the results of foreign scientific researches. Thus, a prominent Polish scholar S. Vyatrovskiy justifying the specialization in pedagogy, provides historical and philosophical analysis of the science's development in the twentieth century. He refers to the works of Polish, German (D. Lenzen) and Czech scholars (J. Pruha). Professor offers author systematization of pedagogical sciences, covering four areas such as fundamental teaching; basic educational disciplines, determined by the way of human development; pedagogical disciplines that meet major directions of human activities; subsidiary and borderline disciplines (Wiatrowski, 2004, 40–44).

It should be mentioned that such systematization of pedagogical sciences was the result of long-term systematic scientific analysis, which had been carried out by the scholar for several decades. Q. Vyatrovskiy suggests that the "pedagogy atomization" will continue to grow, although it is often said that any division is impractical. However, analyzing different approaches, he singles out the following important trends: increase of social demands on pedagogical knowledge in various areas of life and work; prolonged development of pedagogical knowledge in both theoretical and utilitarian (practical) fields and also specialization in modern sciences. Consequently, it is difficult to imagine the possibility of solving today's problems, especially human ones, without the use of special scientific knowledge and methods. The scholar proves that without specialization the development of modern science is hardly possible.

Theoretically grounded principles concerning the integration and specialization in pedagogical sciences in the conditions of globalization process are acquiring the utmost importance. Particular attention should be paid to scientific problems, analysis of the genesis and modern categories of specialization and integration. There is an undeniable interdependence of these concepts, which, at first glance, give the impression of being contradictory and even potentially mutually exclusive. Under these conditions appeal to topical problems of modern education and combination of the efforts of different sectors' representatives of scientific knowledge for the purpose of theoretical and methodological research take first priority.

RESULTS

Human labour as eternal category. That is how we called a preface to the book of Polish scholar Tadeush Vatslav Novatskiy "Human labour. Analysis of concept" ("Praca ludzka. Analiza pojęcia"), published in Ukrainian in 2010 in Lviv publishing house "Litopys". T. Novatskiy chose five statements as epigraphs to his philosophical and pedagogical work that belong to great scholars of different epochs. They are: "... the birds have wings to fly, so people have hands to use them as a tool. Our soul and body become stronger and strengthened due to labour, and they decline and waste themselves through idleness and



laziness (Andrzej Frych Modzhevskyy (1503–1572)); Labour creates the history of mankind (Giordano Bruno (1548–1600)); Man has so much knowledge as he gained by work and creativity (Dzhambatysta Vico (1668–1744)); Labor is the source and measure of value (Adam Smith (1723–1790)); The one who complains of work has not comprehended life; it is the lever that moves everything. Rest is death and labour is life (Wojciech Yastshembovskyy (1799–1882)) (Novatskyy, 2010, 8).

For the preface to the Ukrainian edition of this work we have chosen the words of famous Polish and a great friend of Ukraine professor T. Novatskiy: "Work of hands led man to his current position in nature ... The spiritual world is built on the material achievements and experience of working hands".

Preface to the Polish edition of this extraordinary book was written by professor Frantisek Shlyosek who is the chairman of the international scientific association "Ukraine-Poland". Let us refer to the last two paragraphs of the preface. Analyzing the content of the research of professor Tadeush Novatskiy, the author ponders: Is it a philosophical treatise about labour or practically a scientific investigation, which reveals the understanding of nature and value of labour? And, perhaps, both?

In his book, Tadeush Novatskiy presented the results of long-term research. Its Ukrainian edition is the fulfillment of the author's dreams so that his scientific thought can rush beyond the geographical boundaries, become the achievement of other nations. The fundamentality of this seemingly not very voluminous book (181 p.) is proved by the appeal of Nestor of Polish pedagogy (that is how Novatskiy is called) to opinions, statements and conclusions of 138 scholars who are philosophers, sociologists, historians, psychologists, teachers and politologists. Certainly, this suggests a comprehensive interdisciplinary analysis of labour category. The epilogue made by Doctor of Philosophy, professor, actual member of National Academy of Pedagogical Sciences of Ukraine, director of the Institute of pedagogical education and adult education of NAPS of Ukraine Ivan Zyazyun became quite the logical culmination of the publication that is called "The creative achievements of Tadeush Novatskiy - the anthem of working man". "Each of his work is a step to the truth, to understanding of human intelligence, human spirituality. He is one of the world's first pedagogues-researchers who saw the step to civilization achievements of human intellect and human sensuality through permanent education, that reach deep layers of creative human potential by means of a variety of experience.

Philosophical reflection in the works of Tadeush Novatskiy takes the concept of mastery. He describes it as the highest expression of skill system, bringing skills to the maximum level, the ability of efficient solving the most difficult pedagogical situations. At the same time (according to A. Makarenko) the scholar raises the question of pedagogical skills in the system of vocational education. As for the subject of labour process, his mastery is based "not on the mechanical ability and a large number of skills, but is associated with plasticity, quick adaptability to new situations, new materials. Flexibility of acquired skills and, therefore, the way to the excellence in the field of motility depends on the way of skills development" (Novatskyy, 2010, 173–175). This conclusion of an outstanding Ukrainian scholar Ivan Zyazyun has the important methodological significance for understanding the interdisciplinarity of philosophical and pedagogical works of Tadeush Vaclav Novatskiy.

"Dreamworld" ("Świat marzeń" is the last book of the professor that was published in 2010 in Lublin (publishing house at Maria Curie-Sklodowska University). Ukrainian edition of the book was published in December, 2012 that is three months after its author's funeral. The rector of Dragomanov National Pedagogical University, corresponding member of





National Academy of Sciences of Ukraine, academician of the Academy of Pedagogical Sciences of Ukraine Viktor Andrushchenko wrote in "Word about teacher and scholar" (the preface to this edition): "The great scholar, indefatigable researcher, gifted teacher, recognized and appreciated by the whole world for his spiritual passion for his job. Tadeush Vaclav Novatskiy does not fit into any verbal description, for his talent was wider than any signified limits. Each of his work is a step into the evolution of education, didactics, methodology and at the same time, an endless search for the truth of life.

The giant of thought as he was the scholar devoted his scientific activity to thinking and awareness of the human spirit and intellect, which is reflected in his numerous books. World academic institutions and powerful educational establishments had the honor to keep works of Tadeush Novatskiy in their library funds that became a model of true scientific argumentation and interlacing the issues of pedagogy with social, environmental, economic and cultural issues of society. Laconic phrases of the scholar concealed the restless desire for new knowledge and hard work" (Novatskyy, 2010, 5).

His deep thoughts that passed through the very heart and soul, the scholar concludes as follows: "To raise the moral level of society it is necessary to protect children and youth from excessive violence and look for the golden mean that will enable the harmonious development of the individual in accordance with social norms. In the world without wars and physical violence, the main driving force that would ensure public cooperation can only be love in its various forms: kindness, care for others, mutual assistance, cooperation, friendship, sympathy, fraternity ..." (Novatskyy, 2010, 108).

As the epilogue we have chosen the following aphoristic words of the prominent scholar: "Dream is the search for ways to happiness. In dreams desire turns into action. Dreams are the generator of mental and spiritual energy. Dreams give the meaning to life when they open prospects of the realization of ideas". So, some dreams gave birth to many others, and desired became a reality thanks to the tireless work of the scholar, his creative pursuits throughout life, constant creative self-perfection, innovative and prognostic vision of issues, external and internal causes of their origin and solutions (Novatskyy, 2010, 109–110).

Thus, human labor methodologically grounded and psychologically and pedagogically dreamed by the professor T. Novatskiy is the conscious human activity aimed at the creating of socially relevant material and spiritual values that are necessary to meet the needs of an individual and society. Labor is the main form of life for both an individual and society and the leading factor of sociogenesis. However, it is a means of self-expression and self-identity of an individual, the implementation of his intellectual and creative potential, experience and sense of moral dignity. Different needs, interests, inclinations, sense of duty, responsibilities encourage an individual to work and act as motives. Labour implies the availability of particular knowledge, abilities and skills that constantly enrich and develop themselves. It forms physical, spiritual, psychological and physiological qualities. The labour process presupposes items such as a) purposeful employment; b) work subject; c) tools; d) conditions; d) results. This is what defines the main features of human labour, its indirect role in the interaction between man and nature, its expediency, the significance of perfectly presented results. Having impact on the labour subject through labour means, an individual changes the subject according to the purpose. Reaching goals, he meets his most important needs and sense of purpose is connected with the motive of labour (Encyclopedia of education, 2012, 707).

As W. Fisher and W. Synjavskiy point out, the process of labour results' achievement causes the professional human growth, which depends on the degree of versatility, efficiency



and creative work form. The social nature of labour requires working and vocational training, teaching and education of cultural worker, scientific work organization in order to increase its efficiency and security. The understanding of these important research issues is rooted in the works of Ukrainian scholars such as L. Burlachuk, G. Kostiuk, M. Lukashevich, E. Mileryana, V. Molyako, P. Quail, V. Romentsya, V. Fishermen, Y. Trofimov and others.

"Labour gets its true purpose only when it serves not only as a source of livelihood, but also as a source of inspiration and pleasure" (Encyclopedia of education, 2012, 708). This conclusion of Ukrainian psychologists fully coincides with the main motif of T.V. Novatsky scientific works.

Labour pedagogy. In terms of informational and technological society all the processes are considerably accelerated and are becoming more and more dynamic and interrelated. T. Novatskiy draws attention to the deep historical and philosophical roots of labour pedagogy. The professor states that only through labour man gets acquainted with the world, regularity and efficiency of the existence of which are only confirmed by the results and achievements of human activity. He justifies the methodological essence of this concept: "The concept of labour is extremely complicated, it covers some phenomena in language and social consciousness such as production labour, social activities, spiritual work. But the concept of labour is found in many other contexts. Here are some examples of the most important ones: labour and health, danger to health; labour and effort, labour exhaustion, discourage; labour and freedom; labour and socialization; labour and social stratification, labour division; labour and culture (material, social and spiritual); labour and wealth; labour and morality; labour and self-realization; labour and values; labour and nature; labour and creativity; labour in the existential dimension of an individual; labour in society; labour and improvement.

Wealth of contexts that include the concept of labour is the result (affecting it at the same time) of diversity increase, variety of labour itself, which lies in the regular participation of social and individual goals in labour process, diversity of labour material (from organic substances to merely theoretical conclusions)" (Novatskyy, 2010, 161–162).

In the monograph "Vocational Studies" ("Zawodoznawstwo") scholar traces the history of origins of labour rights and its development at different stages, origins of professions, their expansion, transformation and integration, taking into account the social and economic needs. The wide range of concepts connected with labour rights, labour pedagogy as the pedagogy of subdisciplinarity, he presents in the "Lexicon of labour pedagogy" ("Leksykon pedagogiki pracy"). We believe that this unique scientific reference book provides an opportunity to see the depth of the issue and trace the path of enriching conceptual and terminological apparatus of labour pedagogy.

First of all, it causes considerable scientific interest in the meaning of this definition, its constant refinement, polishing and taking into account the research results of other scholars who are experts in labour pedagogy. In the monograph "Pedagogy and general subdisciplinarity" ("Pedagogika ogólna i subdyscypliny") T. Novatskiy emphasises the importance of pedagogical analysis carried out in the light of "man-labour system". In the first place for him appears to be the analysis of personality development, relations of education processes, character formation, connection between man and environment. Worth attention we find T. Novatskiy's recommendations for reference to the concepts which characterize the man's attitude to labour, that is his motivation to labour; formation of abilities to solve problems connected with labour, professional development of man; professional studies, and also biophysical and moral qualifications, specific professional





qualifications, professional characteristics. The scholar indicates that the term "labour pedagogy" is generalizing and integrated. It combines such areas as industrial pedagogy, pedagogy of labour establishments, economic pedagogy, agricultural pedagogy (Novatskyy, 1999, 314). In our opinion, systematic and interdisciplinarity can be traced in this approach.

The work of professor Z. Vyatrovskiy, who is a foreign member of NAPS of Ukraine and a talented student and follower of professor T. Novatskiy, is extremely important in the context of the raised issue. The issues the scholar relates to the most priority-oriented of labour pedagogy in the context of academic transformation are:

- issues of orientation, vocational guidance and "extension";
- issues of other approaches to the construction of vocational schools and vocational training in the reforming educational system;
- issues of work qualifications, including competence, responsibility and professional mobility of professional schools graduates;
- issues of employment, labor activity and unemployment (not only in the economic context);
- direction issues and organization of continuous training of employees and creating the necessary conditions for the implementation of professional skills' achievement;
- issues of subjective interpretation of an employee in a complex labour process (Wiatrowski, 2004, 20).

Agreeing with the definition of complex interrelated problems we should emphasize the importance of the labour psychology in these complex processes. This scientific subdiscipline is closely related to other sciences of man labour, including labour pedagogy, work sociology, praxeology, labour philosophy, labour physiology, ergonomics, work organization, working law. Q. Vyatrovskiy emphasizes the need to study such crucial and yet challenging issues, which, in his opinion, are: compulsory labour rights; professional development throughout life; professional skills and competence; work organization and ensuring of its implementation; conditions of high-quality professional activity; awareness of the need of their own professional activity, the development of professional identity; modern understanding of professional skills combined with professional mobility, high and rational enterprise, as well as reliability in every socially conditioned professional situation (Wiatrowski, 2004, 62).

So, as scientific and theoretical researches assure, labour pedagogy and professional pedagogy justify such principles of vocational education as proactive nature of vocational training; continuity; fundamentalisation; integration of vocational education, science and industry; equal access to high-quality vocational training for different groups of people; flexibility and interconnection between vocational training process and restructuring and further development of economy and employment, the development of various forms of ownership; diversification; regionalization of vocational education; combination of general and vocational training; unity of vocational training and upbringing, ecologization, variation, individualization and differentiation.

Labour Psychopedagogy. It is quite reasonable to take into account the place of labour psychology among the psychological sciences carrying out scientific researches. Professor K. Charnetskyi distinguishes such theoretical subdisciplines as psychological (social psychology, general psychology, educational psychology), as well as practical psychological subdisciplines (developmental psychology, work psychology and clinical psychology). This division encourages to complex interdisciplinary researches:





- The working man different age, social and professional experience, social and cultural conditions of towns and villages; (A related issue is the choice of profession, motivation, vocational training, the process of mastering future profession, beginning of professional activity, adaptation and peculiarities of labour at different stages of professional development);
- Work conditions in different economic sectors, on large and small enterprises of different ownership (this set of issues also includes such common tasks as "employmentunemployment"; company modernization, its liquidation, retraining, social, material and technical working conditions).
- Work results the amount and quality of work, motivation to work, labour threats, conflicts etc.

As we can see, the problems of the labour market and the development of vocational education and training cover a large range of issues that are on the verge of psychology, pedagogy, neuroscience, economics, ergonomics, sociology, statistics and other fields of scientific knowledge. They also require research on the basis of the multidisciplinary approach.

The explanation of a new direction that acquired the name *work psychopedagogy* has become a notable step in interdisciplinary researches. Professor J. Carney believes that man in work environment is systematically associated with different spheres of life and correspondingly with fields of science that investigate these issues. In particular, it implies philosophy, anthropology, labour psychology, labour physiology and medicine, ecology, economics, labour sociology and pedagogy, geriatric pedagogy, culture pedagogy, engineering sciences, management, law etc.

In our opinion, the results of this long-term research are rather promising. On the basis of integrative approach J. Carney substantiated the definition of "labour psychopedagogy" and offered an analysis of its content in the following areas: modern labour pedagogy – interdisciplinary problems; employee of the institution (work establishments); study of labour and occupations; work time organization; entrepreneurship; psychological mechanisms of human behavior in the institution (work establishment); adjustment (adaptation) to labour and professional selection; work motivation; adult education institution (institution strategy and educational policy); art of being an employee; styles of adult behavior (cognitive and emotional styles, learning styles); manager authority (formal and informal authority, charismatic personality, authority and power, cultural preconditions of authority); pathological phenomena on the modern enterprise (workaholism, professional burnout, mobbing) (Karney, 2007, 5–6).

On the basis of the interdisciplinary approach J. Carney made conclusions about the labour pedagogy in the twentieth century, in particular concerning the issues research sector of quality management, knowledge management and the creation of agencies of individual (personal) work guidance and work organisation in the terms of delocalization. We believe that offered directions of interdisciplinary researches are of current importance in the present conditions of vocational education and training modernisation in Ukraine.

Professional pedagogy. Professional pedagogy is the study of general and individual laws, patterns, principles and conditions of education, training and professional upbringing of an individual (skilled workers, engineers, teachers, doctors and other specialists). Professional pedagogy studies the patterns and the laws of teaching an individual occupation and the formation of professionally and socially important personality qualities of individual employees and production staff in general for different sectors of industry, agriculture and services, development of their professional competencies taking into account modern and





perspective market economy requirements. It reveals methodological, theoretical and methodical foundations of educational process in a professional school at any level in the system of vocational training of specialists, including short-term training in the production conditions as well as retraining, training the unemployed in job centers, further education.

The subject of professional pedagogy is systems and processes of education, theoretical, practical and industrial training, personality education and formation, cohesion and relations between them; their purpose and features, professional education content, that is determined by the social order and varies according to the transformations in the conditions of scientific, technical, informative and technological development; features of mastery of scientific and technical knowledge, professional skills, ways of professional activities, development of professionally important qualities of specialist's personality, his professional competence and expertise. Professional pedagogy studies problems of theory and practice of vocational education and training, interconnection between these categories at different stages of professional development of an individual's personality. Ensuring of interconnection between pedagogical and production processes (taking into consideration the peculiarity of industry fields, agriculture and services) is essential for the development of continuous professional lifelong education.

Methodological principles of professional pedagogy are principles of philosophy, logic, sociology, economics, and psychopedagogy. According to S. Batyshev it enables to raise generalisation to a higher level of synthesis of vocational and pedagogical phenomena, cover a wide range of sciences' interaction in the argumentation of educational systems, identify conditions of social reality conditions in which vocational school operates. Pedagogical theory of vocational schools, apart from other branches of pedagogical knowledge, develops through continuous interaction of pedagogical laws, laws and functioning principles of the various industries and fields of professional activity. In market economy and dynamic changes on the labour market its importance is significantly increasing.

Professional pedagogy aims to provide a holistic development and operation of systems such as "man – society – nature", "equipment – production – society", "man – labour – production team" (S. Batyshev). The integrity of the educational process in every pedagogical system in mastering future profession by pupils, students, military school students, and various categories of adults in terms of lifelong education are influenced by interdisciplinary and inter-rotational relations.

Professional education as a systematic object covers all the subject areas of employment, formation and professional development of an individual at different life stages. In terms of informative technological society, these processes are greatly accelerated and are becoming more and more dynamic. Professional pedagogy justifies principles of professional education such as proactive nature of professional training; continuity; fundamentalisation; integration of vocational education, science and industry; equal access to high-quality vocational training for different groups of people; flexibility and interconnection between vocational training process and restructuring and further development of economy and employment, the development of various forms of ownership; diversification; regionalization of vocational education; combination of general and vocational training; unity of vocational training and education, ecologization, variation, individualization and differentiation.

At the beginning of the twenty-first century we can observe the increasing importance of directing researches of vocational pedagogy to identify the key factors that will influence the development of training systems of production staff in different fields: demographic changes; labour migration; growth of labour demand with respect to supply; deepening





contradictions between the growing demand for skilled workers in the labour market and current level of their qualifications; decrease of labour quality due to the aging and retirement of highly skilled workers from the production sector; development of production on the basis of the introduction of new techniques, new technologies and materials; increasing demands of employers for the competence of workers; the increasing role of social partnership.

Professional pedagogy as subdiscipline has an integrated character. It proves its theories based on research results from other fields of scientific knowledge. This is due to its system object that is "vocational education" which covers all subject areas of knowledge, activity, formation and development of specialists in various industrial sectors. This allows professional pedagogy to generate new theories in terms of integration processes of informative and technological society (Encyclopedia of education, 2008, 727–728).

Taking into account the research results on labour pedagogy, professional pedagogy and labour psychopedagogy it is reasonable to justify principles of psychological and pedagogical aspects of prognostication labour market demands for skilled workers at national and regional levels; consolidation of efforts of relevant ministries and agencies, employers, academics and public associations; development of social partnership; increasing the responsibility for quality training, retraining and advanced training of workers; legislative support for the preparation of competitive labour market workers.

So, such subdisciplines as labour pedagogy, labour psychopedagogy and vocational pedagogy have been formed in the system "man-labour". These subdisciplines of pedagogy have integrated character. Their theories are justified on the basis of research results from other fields of scientific knowledge, because their system object is vocational education, on which all the subject fields of knowledge, activity, formation and specialists' development from different production kinds and directions are focused. This enables vocational pedagogy to generate new theories in the terms of integration processes, informative and technological society.

CONCLUSIONS

Summarizing quite brief analysis of this complex issue in the context of the "manlabour" system, we would like to indicate that Ukrainian science and practice require increase of attention to the research of scientific pedagogical and psychological problems, and especially vocational pedagogy, labour pedagogy and psychology in terms of life-long education and also repeated changes in application of knowledge and skills that is change of jobs during the active period of life. This research will contribute to the deepening of scientific researches on vocational pedagogy, labour pedagogy and psychopedagogy and accordingly the obtaining of new scientific knowledge that will enrich and enhance methodological pedagogy level.

New scientific step in this case is the "Main directions of research on pedagogical and psychological sciences in Ukraine", approved by the General Meetings of the NAPS of Ukraine on November 8, 2012, which have offered new research areas of vocational education, continuing education, vocational education psychology, organizational psychology and work psychology, as well as the theoretical and methodical foundations of vocational training and adult education, vocational training in the production and training for the unemployed (Main direction of researches on pedagogical and psychological sciences in Ukraine, 2012). Their implementation requires a high level of scientific culture, creativity, critical thinking, social responsibility and prognostic vision of solving problems, which the future of every individual, family and, of course, our state depends on.





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