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IMPLEMENTATION OF PEDAGOGICAL SUPPORT OF STUDENTS PROFESSIONAL SELF-DETERMINATION IN THE POST-INDUSTRIAL WORLD

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Abstract

To gain a deeper understanding of the way post-industrial changes affect organisation and techniques of professional self-identification, it is necessary to use the ideas that have not been properly developed in the course of researching this phenomenon. The idea of the need to transform the views on the labour subject and career self-identification in the post-industrial age, within the framework of which the notion of subjectivity in labour and formation of the subject of the career self-identification should be reconsidered, has to be researched with regard to the changes caused by the pressure of new kinds of communication and the post-modernist mentality. The idea of pedagogising the digital economy and the technological breakthrough is postulated, and within its framework, the development of the digital economy in the pedagogical context should be regarded not only as a consequence of technological revolutions and a condition for economic globalisation, but also as a phenomenon of digital culture development. The idea of humanitarian security of the subject of career self-identification in the post-industrial age is connected with the task of compensating for the risks of implementation of trans-humanitarian attitudes and breaking with the academic scientific tradition (concerning the liberal arts), as well as failure of many participants of breakthrough processes to grasp their pedagogical meanings or their distortions.

Keywords: Career self-identification, pedagogical support, post-industrial world.

1. Introduction

In Russia, considerable experience has been gained in organising pedagogical support to prepare students for professional self-identification (Chistyakova, Rodichev, & Cherkashin, 2018). The fundamentals of the modern concept of professional self-identification pedagogical support based on the notions of the industrial nature of production and the corresponding features of the society, were developed in the 1990s by Polyakov et al. (1993). The concept of professional self-identification support within the context of continuous education implies that the way it is understood transforms in accordance with the consequential stages of social development: from traditional (agrarian, pre-industrial) society to the industrial one and then to the post-industrial one (Blinov & Sergeev, 2018; Di Leo, 2017; Tabrizi, 2016). In modern Russia, where young people are choosing careers, the transition from the industrial society to post-industrial one having some traditional elements is timely.

2. Problem Statement

Over the past 5 years, the technocratic-manipulative and humanistic views on career guidance are becoming more polarized; the specificity of the levels of interaction pertaining to career guidance has become more clear-cut, and this in its turn calls for overhauling conceptual methodological benchmarks for organising career guidance work. Step-by-step realization, systematicity and comprehensiveness of activities pertaining to professional self-identification support, its coordination by the state, the competence-oriented approach to organising the activities for psychological and pedagogical support of professional self-identification, gradualness and continuity of self-identification support, the unity of professional, educational and social self-identification, analysis of the role of family as the subject and object of activity pertaining to self-identification support of students, and regulatory support of educational services related to self-identification support were among the main ideas of the previous concept. In our opinion, some important ideas necessary for understanding the impact of post-industrial changes on organizing and techniques of self-identification support remain undiscussed. These ideas are the following: the need to change the views on the subject of working activity and professional self-identification in the post-industrial age; pedagogisation of the digital economy and the technological breakthrough; humanitarian security of the professional self-identification subject in the post-industrial age; the rehabilitation of the content of child and adult education (as regards its components that are relevant to career guidance); and the adaptation of scientific concepts of professional self-identification support of young people to the "skillisation" of the given semantic field.

3. Research Questions

How will the strategy of the development of professional self-identification support change during the transition from the industrial society to the post-industrial one?

What changes in the techniques of the professional self-identification support are expected to take place?

Which ideas accumulated by Russian scientists specializing in solutions for career guidance are relevant in the current socio-cultural situation?

4.   Purpose of the Study

Analysis of the phenomenon of the impact of post-industrial changes on organisation and techniques of professional self-identification support of students in the context of post-industrial changes.

5.   Research Methods

In this research paper, a complex of theoretical methods (including the studying and analysis of the literature on the subject, analysis of teaching experience in the sphere of career guidance, and modelling) and empirical methods (including observation, questionnaires, discussion, and analysis of the products resulting from the educational process) was used.

6.   Findings

To analyse the impact of the phenomenon of post-industrial changes on organisation and techniques of professional self-identification support of students in the context of post-industrial changes, it is necessary to be guided by the following ideas that were not sufficiently covered in the previous version of the Concept.

The idea of the need to change the views on the subject of working activity and professional self-identification in the post-industrial age.

The understanding of subjectivity in working activities and of development of the professional self-identification subject may require some corrections due to the changes determined by the pressure of the new forms of communication and the postmodernist mentality (Klimov, 1999; Pryazhnikov, 2016; Rikowski & McLaren, 2002).

In particular, the periodization used by the authors mentioned above, fails to take into account the changes connected with the intervention of the modern sources of information and tools in the early periods of development. Information loses the relevance for personality (compared with the period when these peiodizations of self-identification in life and career were being developed) (Campbell, 2018; Rogers, Malancharuvil-Berkes, & Mosley, 2005). From early childhood, a child finds himself caught in the whirl of the avalanche-like generation of imaginary things (for example, by means of viral reposting), unreal objects, and forms without content, which inevitably affects his perception of culture (including its working and professional aspects). This may have a considerable impact on the development of the ability to reflect and to understand. As a rule, the modern teenager has the formed habit of distinguishing (or, in some cases, not distinguishing) between the actions of his virtual image and his own ones. As a result, there is a risk of teachers and psychologists trying to raise "the subject of self-identification" and "the subject of working activities", cultivating certain values, creating possibilities and organising processes, but without achieving the subject, the prototype of which was meant by career guidance experts when they were developing their theories and practices. To some extent, it is possible to postulate "the subject's death" as defined by postmodernists, or the substitution of the subject with "the digital cretin" (similar to the professional cretins coined by Karl Marks, but with no negative connotation).

The gap between all the humanity's experience and individual experience of every human being is widening exponentially. This often causes modern people to have the feelings resembling the symptoms

of the posttraumatic stress disorder. Nowadays there appear researches (including exclusively psychological ones) on self-identification of an individual under the conditions of uncertainty brought forth by the postmodernist mentality. Thus, for example, Leontyev (2015) presented a theoretical analysis of the uncertainty as a fundamental feature of the modern world and of the psychological consequences that arise from the challenge of uncertainty.

As the uncertainty comes to the fore, the society faces the problems of understanding the nature of scientific knowledge, the image of the human being, and self-identification in relation to values. Solving these problems is possible with regard to the existential picture of the world based on the acceptance of the uncertainty as the fundamental condition of existence. The recognition of uncertainty and tolerance towards it are necessary for and indicative of psychological maturity and health. If the postmodernist disruption of social life regulation has taken place, the only way out is for the individual is to create their own inner structure and assume the responsibility for their behaviour, as well as to work out their independent subjective criteria in the absence of any objective external reasons for it. This way is difficult, Leontyev (2015) says, but there is no alternative. He identified two opposite strategies of dealing with "the challenge of uncertainty":

In the modern world, there are many opportunities for advancing and developing till extreme old age and death, without stopping in this process, but there are also a lot of possibilities to not advance, to stop after reaching the age of majority and forget about further sophistication and development under the slogan "Relax, don't sweat", and stand still in the state of blessed tranquillity for good; these are the two opposite ways to respond to the challenge of the modern world, which provides many opportunities for both strategies. (p. 2)

To a certain extent this correlates with disruption of the common periodization of professional self-identification, which is happening to more and more people (from young people establishing start-ups who demonstrate abnormal leadership qualities and quickly gain important experience, to adult citizens massively showing infantile behaviour).

The modern individual has to constantly maintain the balance between the real world and virtual practices (gamification, presence in cyberspace and social networks, and virtualization of culture and arts), and at the same time he exists in both realities, virtual and social. This makes him constantly face the risk of distortion of the habitual forms of his occupational, family, religious, emotional, and spiritual life.

In the context of revising the concept of the subject of professional self-identification, it is worth noting that the ongoing changes make people acquire relevant skills stimulating their professional growth, which ensures leading a certain lifestyle rather than promote development of the expert in the way Klimov (1999) and Pryazhnikov (2016) understand it. As time goes by, the professional area itself becomes questionable. The modern employee has to acquire new and unexpected professional skills and to switch from one occupation to another. A new type of "unwanted man" is inevitably emerging, and so do the realities of the so-called "new slavery" shaped by the growing tranquillity of the human life,

including its occupational aspect, and the new ways to manage human capital, some of which may well be destructive.

On the other hand, it must be admitted that the "digital cretin" as a potential subject of professional self-identification will most likely quite successfully act not so much in his professional sphere, but rather in a train of changing life and professional projects. And the excess of discreteness and spontaneity of manifestations of his development in the informational environment may play not only a negative role but also a positive one.

Therefore, an in-depth analysis of approaches to the need of either to cultivate scientific concepts by Klimov (1999) and Pryazhnikov (2016) in the practice of professional self-identification support (if the prevailing industry-oriented ideas about career guidance continue to dominate), or to transform them (if the post-modernist influences extend further) is required.

Another idea is closely connected with this one, and that is the idea of creating an age-specific means of assessment of the readiness for professional self-identification that would be available to non-specialists (i.e. the average user) and play not so much a diagnostic role, but rather a preventive one.

The lack of this means remains quite a serious problem, for regardless of the distortion in the age periodization structure, the goals set in the Concept of professional self-identification support of students in the context of continuous education are still relevant: as a schoolchild is getting older his ideas about the possible options should be gradually growing, and this in its turn calls for step-by-step widening of the content of informational work in the system of professional self-identification support (Blinov & Sergeev, 2018). As the subject of self-identification develops, his degree of independence increases, and that is why the relations of affecting and directing should transform into those of assistance (Rodichev, 2018).

In the post-industrial world, opportunities for studying the professional self-identification subject are changing. Researches get access to e-Humanities, or Digital Humanities, which combine theoretical and practical methods of research with the use of digital technologies. The modern period of their development is characterized by creation of hybrid tools for producing and managing the digital knowledge in various digital contexts, and by forming new paradigms, among which "digital career guidance" or "professional self-identification support" will also find their place, depending on how the issue will be tackled by the expert community.

Another idea that is closely connected with this one is the idea of pedagogisation of the digital economy and the technological breakthrough.

The realization of the digital economy development programme (as of this moment, it is called The National Project "Digital economy of the Russian Federation") in the pedagogical context should be considered not only as a consequence of the technological revolutions and a condition for economic globalization, but also as the phenomenon of the new digital culture shaped by the interdependence of post-modernist philosophical ideas. The structural changes in the sphere of education stem from the virtualization of social communication and traditional cultural practices. The methodology of analysis of the digital economy and the technological breakthrough should have not only technocratic, but also humanitarian aspects (e.g. due to the fact that even small changes connected with digitalization incur

trans-humanitarian risks, transform the ideas of identity and values, and exert impacts, both positive and negative ones, on the development of the working activity subject and professional self-identification.)

In this context, pedagogisation should be regarded as the integration of the goals and values of the development of the individual and acquisition of his ability to be free into the areas of the state, society and business that are being transformed, and as unveiling the pedagogical sense of the transformational processes in the course of public and professional discussions. And the provision of its methodological feasibility and organisation (in particular, its correlation to the systematic, personal, activity-related, culturological and other approaches) may become a crucial task. The primary aim of such pedagogisation is making it possible for "the persons making decisions" to acknowledge the responsibility for the pedagogical consequences of the digital transformation. In particular, the ethical, psychological-pedagogical and organisational-pedagogical use of the digital toolset of "the personal trajectory" are especially noteworthy (Titov & Cherkashin, 2016).

The evident drawback of the pedagogical conceptual understanding is revealed while assessing the forced development of the idea and practice of using "the digital double" for creating diagnostic-advisory tools. According to Pryazhnikov (2016), one of the key paradoxes of subjectivity in professional self-identification is that "the more we get to know the self-identifying subject, the more we deprive him of subjectivity". But now this paradox can become a norm not due to the development of or the need for a means of psychodiagnostics, but in the course of active intervention of the digital regulator in all the spheres of human life, including the process of life orientation.

It is possible that one of the aspects of the digital transformation in the pedagogical context will be creating "lamp oases", including the niches relevant to career guidance, which are used for implementing solutions designed to prevent the domination of digital information and intentionally provide non-digital «environmental enrichment», «digital detox», and «device-free events» (debates, games, voluntary forms of promoting face-to-face communication, and travel programmes).

The educationally-relevant transformations of the matrix of the National Technological Initiative (NTI), in which the aspects crucial for life and professional self-identification are originally subordinate and peripheral, are of great interest for the pedagogisation of the digital economy and the technological breakthrough. At the same time, we can hypothesize that this transformation will take place, at least to some extent, for the block of the matrix called "talents" has already appeared since when the matrix's creation and introduction. There was no such a block in the previous version; it took the place of the block "Institutions". In this context, the NTI matrix should also be regarded as a guideline for create individual educational and career-oriented tracks and educational institution development programmes.

It seems of significance to define the following in terms of scientific-methodological support: the criteria and performance indicators of a student's educational progress (including the ones stated in the Federal State Educational Standards), which are undergoing changes due to the processes resulting from scientific and technological development. For this purpose, it seems appropriate to create the following preliminary system. One of its dimensions is the stages of education, possibly with age-specific basic education, and the other dimension is indicators of motivation, general awareness of the current and prospective technological changes and their role for the subjects of education, and of gaining and

analysing experience (e.g. as a radical solution for engagement of youth techno-entrepreneurial companies).

It seems reasonable to formulate proposals aiming at changing the requirements set for the conditions for implementation of educational content determined by the measure of involvement of an educational institution into the processes of network interaction and social partnership with those subjects of the administrative, professional and industrial environment that ensure implementation of NTI roadmaps in the region or the administrative division.

It is important to substantiate the research directions determined by the processes relevant to NTI in education (in particular, it appears that one of the most important tasks is elimination of the contradiction between the specified "requestors" of education and the "requestors" of NTI, which are companies shaping its markets and regarding "talents" as a human resource for their development).

Another idea connected with this one is the idea of humanitarian security of the professional self-identification subject in the post-industrial age.

The problem of humanitarian security of the subject of career self-identification in the post-industrial age is connected with the task of compensating for the risks of implementation of trans-humanitarian attitudes and breaking with the academic scientific tradition (concerning the liberal arts), as well as failure of many participants of breakthrough processes to grasp their pedagogical meanings or their distortions.

Given the objective and expected character of such mentality, we can anticipate a probable synergetic effect not from this trend as such but from its combination with other processes. For example, with the idea of creating an alternative instrument for cooperation between the man and machines, generation of identity in the context of the threat from "new antiquity" and the unpredictable character of technological singularity, as well as the ideas of "upgrading humanity through an analogue of pedagogy" and the quest for "new constants for shaping the human society". The destructive role of the modern school is also proclaimed often. Schoolchildren are regarded as potential underdogs in the "future market", if they do not manage to find a way to ensure their own personal breakthrough beyond the limits of the system imposed on them (here the arguments of the participants of the Discussion about the future "18 years before Christ" as part of the opening pf the University NTI "20.35" are used).

On the other hand, we can observe the spreading of the counteracting ideas. According to them, the control over the desire of the man to become part of the techno-sphere under the total control of artificial intelligence is insufficient. Representatives of these trends are often characterized by the alarmist mentality as regards the prospects of the technological development of the country. This mentality sometimes reveals an aggressive or even deliberately vulgar character.

It should be noted that the representatives of "visionary thinking" themselves define the "new inquisition", that is artificial hindering of technological development and technological isolation from the rest of the world, as one of the global scenarios that can be used to prevent the man from losing control over the techno-sphere.

Therefore, it could be of importance to create instruments of social dialogue not only in terms of development and implementation of career guidance technologies, but also for the purpose of adapting ideas about the future in the context of the problems of the professional self-identification in young

people. Another goal, and it is by no means a less important one, is to overcome the shortage of scientific ideas about the prediction of the picture of the world of labour at least at the level of the definition of the optimal and scientifically relevant approaches to solving urgent problems. Thus, the phenomenon of incorrect use of the "Atlas of new occupations" in pedagogical practice and lack of clarity as to what its genre is, is highlighted by its very authors.

Finally, the idea that is of the utmost importance for updating the conceptual ideas about professional self-identification support in view of the post-industrial changes is that of rehabilitation of the content of child and adult education (as regards its components that are relevant to career guidance).

It seems reasonable to restore in the new context of the post-industrial society the crucial components of the potential educational sphere "Man and his Work". In the 00s, Lerner (2003) put forward the idea to create such a sphere and provided a rationale for it. It asserts the relevance of providing students with the opportunity to gain an understanding of the notions of effective labour and a happy labourer who respected by fellow countrymen, the optimal career, and the prospects of its planning. In the post-industrial world, work should be regarded as a chance to get, according to Lerner (2003), "the freedom to become another man", but this chance embraces, due to the modern trends of social development, not only the professional sphere, but also non-professional, volunteering and family ones.

The changes in the content of education that imply social practices (e.g. in medical centers), volunteering and, of course, professional testing, the result of which may be "converted" and translated into general education, which is adjacent to the academic one, appear to be timely (TET-torille - Työelämään tutustumisen kohtauspaikalle, n.d.).

An important goal is to determine the place of competitions and events in accordance with the results of their forced introduction, the search for their balance compared with other ones, the use of their structural components in non-competitional practice, and looking for ways to integrate and mutually convert the results of the general and further education (with regard to the changes in further education, which make it possible for third parties and individual entrepreneurs to implement them).

It is not impossible that the problem of limitations resulting from the exam barrier, which exists due to the restriction on subjects required for being admitted to universities providing the most popular specializations and due to the lack of the opportunity to change the specialization at stages closer to graduation, will also be a pressing one.

Besides, it is not impossible that in the near future the problem of career guidance in particular groups of young people, such as children of migrants, underachieving students, teenagers showing deviant behaviour, and young citizens in penal establishments, will arise differently and become more urgent. The post-industrial character of the world of vocations and education will require rejection of standardised forms of assessment of students' progress, as well as finding new «drainage» ways to solve the problem in order to ensure security and social adaptation of special groups of youth.

An essential component of this issue is changing the strategy of raising awareness among and promoting participation of parents in the professional self-identification support of students. The role of parents is now played by the generation who chose their career in the 90s, not in the 00s, and who differ

significantly from the previous one in terms of understanding the importance of choosing a career, the degree of awareness of career options, and their attitude to further education.

In the context of this idea, the adaptation of scientific concepts of professional self-identification support of youth to "skillisation" of this semantic field, can be considered.

Over the past few years, the pedagogical language has been forcibly enriched with terms with the root of "skill". One of these trends is due to the spread and codification of the ideas and practices of competitional activities (worldskills, digitalskills, etc.), and the other one stems from the introduction of the differentiation between softskills and hardskills in various pedagogical contexts. By recognising the cultural relevance and urgency for the educational policy of the state and common educational practices of both these things, it is impossible not to note that the constant emphasis made on the word "skill" creates a strong association with habits, abilities, mastery, efficiency and training at the cost of other educational aspects. The oversaturation of the sphere of pedagogical interaction with terms containing the "skill" element inadvertently results in a shift of values in the field towards the priority of usefulness at the cost of other goals, values and aims.

7.   Conclusion

Therefore, it should be noted that our country needs an elaborated strategy of the development of professional self-identification support rather than a system of federal projects compensating for the most considerable risks related to human resource provision required by the technological breakthrough. Original ideas revolving around the features of continuous education and the role of professional and technological culture in the life of an individual were introduced by Russian psychologists and experts in pedagogy. We received a unique legacy, which, through the problems of career guidance, reveals the depths of Russian humanities, and it should remain in demand by the future generations. And for it to become popular, it is necessary to develop arguments that will be available and understandable for them.

Acknowledgments

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