

PEDAGOGICAL TECHNOLOGY FOR EARLY CHOICE OF FUTURE PROFESSION

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Abstract: The problem of preparing a junior schoolchild for future professional choice rarely falls within the scope of interest of educational institutions and teachers, and is insufficiently covered in the scientific and methodological discourse. The relevance of the paper lies in substantiation of the idea that the primary school age is an important link in the general chain of student's preparation for the choice of profession. The purpose of the paper is to present the developed pedagogical technology, which is based on the methods of problem-based learning to ensure systemic propaedeutics for early career guidance. Practical recommendations are offered on the use of the pedagogical technology at primary school, and its step-by-step algorithm is described.

Keywords: junior schoolchild, propaedeutics, choice, professional self-determination, career guidance, self-reflection, pedagogical technology, problem-based learning.

1 Introduction

"Who am I?", "What is the meaning of my life?", "What am I?", "What is my purpose?", these questions are central to self-determination and self-identification of an individual. The life of a modern man is dynamic, follows daily routine, runs according to the established algorithms, and questions of career choice are dictated in a post-industrial society by fierce competition on the labor market.

Most psychological and pedagogical scientific publications on career guidance mostly cover the age of senior school students and school graduates. However, the processes of self-perception and search for identity occurs as early as the stage of early childhood (an analysis of philosophical and pedagogical discourse shows an implicit convention that implies initial life experience under the childhood). The transition to the digital economy and education, the amount of information faced by junior school students, the feeling of "accelerated flow of time", the current methods of project-based and problem-based education give the right to state that it is somewhat late to offer career guidance at senior school age. The author's position regarding career guidance may be expressed as: *the earlier the better*.

A modern school abiding by the federal state educational standards is designed to develop a certain range of competencies, except one: to teach a child how to build a life of optimal comfort in the modern society, which poses one important problem to be solved - one should find its own self and its own place in this world.

Due to the above, the development and substantiation of pedagogical technology in the system of propaedeutical preparation of primary school students for the choice of a future profession is urgent and relevant.

2 Literature Review

In general, sufficient attention is given to the problem of a future career choice in psychology and pedagogy. However, this research is focused on the problem of pedagogical support for the career choice at an early age. The issues of future career choice propaedeutics for junior schoolchildren are tackled in their works by Kh.C. Vokhidova (2016), O.Yu. Elkina (2012), V.P. Kondrashova (2004), V.I. Kormakova (2009), A.Kh. Kurbasheva (2015), N.S. Pryazhnikova (2014), T.I. Shalavina (2009), S.N. Chistyakova, N.F. Rodichev (2013) and others.

Theoretical comprehension of the concept "pedagogical technology" is provided in the works of such Russian scientists as V.P. Bespalko (1989), M.V. Klarina (1999), G.K. Selevko (1998) and others.

The method of problem-based learning is one of the rapidly evolving means of obtaining knowledge in the education system; the international publications address general issues associated with the problem-based learning in school, tertiary (professional) and higher education (Hmelo-Silver et al., 2006; Ikonnikova et al., 2015; Savery, 2006; Dole et al., 2017), and explore how to prepare a facilitator teacher to implement the problem-based learning (Hmelo-Silver et al., 2006). And, as noted by S. Dole, L. Bloom, K. K. Doss (2017), one of the conditions for the pedagogical effectiveness of the problem-based learning is its early use already at the first (primary) level of school education.

The problem of career choice is closely related to the career guidance concepts and is at the center of teachers and psychologists' attention. The personality-centered approaches in the modern educational space to the definition of "career guidance" concept reveal new components within its meaning that relate to the concept of professional self-determination of an individual. According to G. V. Rezapkina (2017), in this context *career guidance* gains a psychological, pedagogical and social meaning, is initiated by the state and prepares a young person for *professional self-determination* (p. 208); based on V. I. Blinov's idea (Blinov & Sergeev, 2015), this is a system of actions implemented within educational and teaching activities aimed at *professional self-determination* (p. 6). The interpretation of a definition reconciling two analyzed concepts was offered by Professor S. N. Chistyakova (Chistyakova & Rodichev, 2013), from her point of view, career guidance is a system of interactions between an individual and the society, which purpose, on the one hand, is to satisfy the needs of an individual in *professional self-determination* and, on the other hand, to reproduce the social and professional structure (pp. 19-20). Thus, professional self-determination as a process and career choice as a result are the effects of career guidance.

3 Research Methodological Framework

The research purpose consists in the development of pedagogical technology for propaedeutical preparation of a junior schoolchild for the future career choice.

The research objectives are:

1. Present theoretical foundations of pedagogical technology for early career choice propaedeutics.
2. Justify the relevance of problem-based learning methods within the modern approaches to organization of the career guidance efforts.
3. Make recommendations on the use of pedagogical technology.

For addressing the research objectives, the following *methods* were used:

For achieving the purpose and solving the defined problems, the following *methods* were used:

- *Theoretical analysis* of the pedagogical and psychological literature on career guidance and choice of profession;
- *Comparative method* for comparing and correlating conceptual researches of different scientists on the topic under research;
- *Method of problem modeling and designing*;
- *Descriptive method*.

4 Results and Discussion

The modern world of professions is wide and diverse, it is an open-end mobile system, with amplification of science-intensive technologies, discoveries in the field of space development, etc. new professions emerge, which are a complete mystery for both parents and children, while other professions lose their importance, and are taken over by robots. That is why a strategy consisting only in raising awareness is not sufficient; a

pedagogical technology is needed tailored to the age peculiarities of junior schoolchildren, their leading activities, and it should be a game, on the one hand, and learning, on the other hand. For this purpose, the educational methodology solution developed by the author, "Journey into the World of Professions": A book for group reading and discussion in the family and in the classroom (Antonova, 2018), is presented, which has a pronounced problem-oriented character. It should be noted that, first, the pedagogical technology based on the methods of problem-based learning has been conceived and developed, and only then the book plotline, stories and creative tasks were developed oriented towards the career choice. This educational and methodical solution is designed to systematize and expand the knowledge of primary school students about the modern world of work and professions; to exert pedagogical impact on the development and correction of their socially significant qualities; to demonstrate the personal qualities that a representative of a certain profession should possess; to produce a list of the professions that are most interesting for junior students. There is a sufficient number of stories that allow a teacher to organize consistent work during classroom hours throughout the school year (if classes are held twice a month) [18, p.8].

Before proceeding directly to the description of the *technology of problem-oriented propaedeutics for career choice*, we would like to discuss the essence and specificity of the "pedagogical technology" concept. We agree with the opinion expressed by V.I. Chuprasova (2000) that the key distinctive features of the pedagogical technology are its distinct scientific validity and systemic nature (p. 4).

4.1 Theoretical Foundations of the Pedagogical Technology for Early Career Choice Propaedeutics

Below we present the main foundations of the pedagogical technology for the problem-oriented early career choice propaedeutics:

1. *The development of value orientations for the career choice in the early school age should be pedagogically managed and systematic.*

In the life of an adult, the career choice is associated with prestige, decent pay, career advancement, etc. Objectively, such aspects do not exist in primary school. In this connection, the actualization of the value and meaning self-determination of junior schoolchildren in the context of professional self-determination involves the introduction of *specifically designed problem-based situations in the educational process*. Such problem-based situations may concern, for example, the awareness of the difficulties related to the career choice, information gaps in any professional field necessary for successful self-determination, contradictory motives behind the forthcoming choice, etc.

2. *Junior schoolchildren should have an idea of necessary professional competences in the world of careers, and be able to make their choice.*

The informational content that the junior students deal with in order to choose their future profession should correspond to the mental world typical for their age and contain an activity component. A teacher shall develop the ability to choose. Here, *different options of choice* in each problem situation should be considered, comprehended and analyzed, because it is important that a child in the early school age is able to choose and go through alternative options of own self-determination in imagination, learn to think and design their future (Pryazhnikov, 2014, p. 41).

3. *Future career choice by a junior student should be viewed in the context of their learning activity.*

Psychologists believe that the most important age-specific development of a growing person occurs through the leading activity, which in the junior school is *the learning activity*. D.B. Elkonin (1997), when analyzing structure of the learning

activity of a junior student, identified the following components within it: 1) motivation; 2) learning objective; 3) learning activities; 4) control; and 5) assessment.

We agree with psychologist O. O. Gonina (2016) that the role of the learning activity in the propaedeutics for early career choice does not receive sufficient attention, its toolkit is wider, and the cognitive activity occurs through the content and methods of learning (p. 27). In other words, a junior student goes through 'didacticization' of the picture of the world and the way of life: he/she perceives the whole world and himself/herself through the lens of the learning activity.

4.2 Actualization of Problem-Based Learning Methods in the Early Career Guidance

According to the idea of M.I. Mahmutov (1998), one of the developers of the problem-based learning theory, if a teacher knows how to create problem-based situations and organize students' activities, provide guidance necessary to find a solution, it means that the teacher uses a practice-oriented approach, and students on their own find answers to their questions and underpin those with scientific conclusions (p. 197).

Problem-based learning technologies are usually opposed to explanatory-illustrative learning. In this connection, the latter is increasingly criticized in psychological and pedagogical circles (Kholodkova & Manakova, 2014, p. 166).

At the same time, the analysis shows that almost all available educational methodology resources about the world of professions addressed to primary schools have been used with the strong predominance of the explanatory and illustrative approach. In the same vein, the work on labour education of junior schoolchildren, using illustrative models, is being carried out, and all this is complemented by teaching schoolchildren to perform simple labour activities independently.

4.3 Recommendations on the Use of Pedagogical Technology

The developed pedagogical technology is based on problem-oriented propaedeutics for career choice and implies the following algorithm of work.

Definition of a problem / a problem-based situation. Due to the age-related peculiarities of cognitive thinking in early school age, the problem situation should be defined as a specific example. These may be educational materials, manuals, presentations depicting characters with clear actions, heroes who find themselves in certain problematic situations and need to perform certain actions to resolve them or find the way out. In the context of the presented didactic manual for children and parents "Journey into the World of Professions" (Antonova, 2018) it is a protagonist Misha Kudashev, a fourth-grader who is trying to choose his future profession.

O. Yu. Elkina (2012) believes that the junior schoolchildren's desire to identify themselves with the characters of the manual is explained by such age-related features as interest in cognition of various social phenomena, including those related to professional activity (p. 115). In the opinion of the psychologist O.O. Gonina (2016), this is also may be attributed to the children's spontaneity, emotionality, active play, imagination, and the ability to associate and compare oneself with a fictional character and to "try on" his stories (p. 122). At the same time, as noted by psychologists, imaginary situations are experienced by children of primary school age as quite real, and this is important for gaining the experience of solving typical problems in the context of a career choice. Such experience makes it possible to develop necessary professionally significant competences.

Indication of guidelines using which a problem can be solved. Such guidelines may include:

- *Behavioural patterns, actions* demonstrated by characters, manual protagonists, or adults respected by children;
- *Evaluation phrases, judgments, statements* uttered by characters both in direct and indirect speech (for example, in the form of proverbs and sayings).

Such guidelines in their essence represent "the patterns of social behavior" obtained from adults by younger schoolchildren (Kholodkova & Manakova, 2014, pp. 113-114), and may be more or less mutually contradictory, which allows the junior students to gradually move from the previously habitual "orientation to correctness" (Ibid., p. 5) to their own choice in a situation allowing for a multiplicity of "correct" decisions. It should be noted that within the framework of this pedagogical technology it is possible to offer guidelines to the students based on the principle of semantic gaps, i.e. not to uncover the whole plot. As an example, proverbs about the role of labor in human life are not cited by the teacher, but are naturally recalled in the conversation conducted by the characters.

Resolution of a problem-based situation (self-determination), which occurs through the completion of offered tasks, answers to questions, and each section of the manual contains the methodological materials of this kind. It should be emphasized that at this stage it is not the verification of the correct choice that is important, but the fact and ways of searching. The systematic completion by the junior students of the tasks offered in the Journey into the World of Professions manual is a training of choice, a kind of philosophy of choice, a space for independent resolution of problem-based situations.

Reflection as a joint discussion of the results and outcomes of choices between students and a teacher, a psychologist, or parents. The teacher "softly" leads the line of discussion; here the good reasoning and awareness of the decision are important in the guided choice made by the child on their own.

The technology of problem-oriented propaedeutics for career choice among junior schoolchildren corresponds to the core conceptual ideas of pedagogical support and value-sense approach to the choice of profession.

The pedagogical support always has a problem-oriented nature. O. C. Gazman (1996) believes that problems of pedagogical support are the problems of a child coping (with the guidance of a teacher) with his difficulties and thus successfully overcoming crises in their development. Gazman indicates obstacles to personal goals and ways to overcome those as pedagogical support objects. Accordingly, the objects of the technology of problem-oriented propaedeutics for career choice are the problems, difficulties, obstacles and crises of professional self-determination, as well as personal strategies for their overcoming.

H. F. Rodichev (2006) points out that the leading task of pedagogical support in relation to the process of professional self-determination is the inclusion in the educational process of the means that help students to "discover" themselves in various activities, including resolution of problem-based situations, where the teacher guides them to the independent resolution. These ideas, which meet the principles of openness of the future, problem orientation, richness of the environment and individualization, reflect sufficiently well the peculiarities inherent in the technology of problem-oriented propaedeutics for career choice.

The presented pedagogical technology can be referred to the so-called "activating methods"; its main distinction, as contrasted to the existing analogues, is that it is intended for the junior schoolchildren.

5 Conclusion

The result of the conducted research is justification of the theoretical, methodological and scientific-methodological foundations for organizing the process of occupational guidance propaedeutics among junior schoolchildren. The developed

pedagogical technology is based on the methods of problem-based learning, takes into account age-specific features of junior schoolchildren, provides introduction into the world of work and professions and facilitates preparation for a career choice in the future.

The career choice is one of the most important choices in human life and it is necessary to start preparing for it at the early school age, when children obtain basic concepts of life and personal self-determination, get understanding of the values of being. A great role in the career choice is played by a teacher providing pedagogical support, motivating children to cognize the world of work and professions, expanding not only the boundaries of students' academic knowledge, but also their knowledge of own selves.

Designing one's own future requires creation of an adequate information backbone on the world of work and professions already at the primary school stage. Predominance of the social and communicative aspect over the content and activity one in the construction of a career trajectory requires acquaintance not only with the narrow occupational aspect of the professions, but also with the broader social and professional context where a modern professional lives and operates. The situation of constant mental experimentation ("exploratory search"), associated with various choice options, which is typical for junior students, requires preliminary acquaintance with the act of choice itself and its reflexive comprehension.

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