Toolkit for Productive Management of Self-Development Support for Basic School Students

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ABSTRACT

The article notes the importance, relevance and the need for the formation of the ability for self-development in high school students. It has been substantiated that the formation of these abilities is possible at the secondary level. The difference in approaches to the implementation of management of productive support for self-development is demonstrated, the objective reasons for the current situation are named, and their relationship with the existing pedagogical tools is fixed. The concept of tools for pedagogical support of self-development is considered. The structural and content characteristic of the concept of self-development of high school students was clarified, for which the structural components of self-development of high school students were identified. Variants of tools for pedagogical support of self-development are proposed, the choice of which is determined by the interdisciplinary approach of researchers to the essence of the process of self-development itself. As one of the possible, a toolkit for pedagogical support of self-development was introduced, in which an important role is given to the adolescent's personal thesaurus. The concept of personal thesaurus of a high school student is concretized. A lot of methods of pedagogical support of self-development associated with the chosen toolkit are indicated. One of the methods is described in detail: the technique of creating pages of a thesaurus dictionary, while the dictionary is considered as a way of organizing concepts in a certain subject area. The stages of work on a thesaurus-type dictionary, basic requirements for this dictionary, recommendations for creating its pages, including work on idioms, antonyms and synonyms, single-root words, associations, phrases, etymology, context of use of the selected concept, etc. are presented. The results of a pedagogical experiment are given, which allow one to assess the practical efficiency of using the technique under consideration within the framework of the chosen toolkit for pedagogical support of students' self-development. In particular, the positive dynamics of changes in the level of self-development of high school students in accordance with the cognitive-thesaurus indicator was demonstrated.

Keywords: high general education, pedagogical support, personal thesaurus, self-development of students, thesaurus dictionary

1. INTRODUCTION

The new federal state educational standard of high general education indicates that one of the most important results of its development is the formation of a culture of self-development throughout life.

One of the directions of the standard of basic general education correlates with the achievement of this result, namely the personal development of students, their self-development, the formation of independence and self-improvement.

According to a study [1], the need for active self-development in school is noted by 73.1% of yesterday's graduates. Increased attention to self-development fits harmoniously into the general context of the new standard, which is based on the postulate about the uniqueness of the personality of each student and the development of their individual capabilities.

In connection with the increased interest in the problem of self-development, research in the field of formulating, structuring and pedagogical support of

self-development becomes especially relevant. It is obvious that without a clear operationalization of the basic concepts [2], without understanding the essence of self-development, the attempt of the pedagogical community to solve this problem seems not quite effective.

At the same time, the analysis of scientific and pedagogical sources testifies to the lack of an unambiguous understanding and clear formulation of the component structure of this concept and, as a consequence, to the absence of a well-established generally accepted toolkit for the implementation of the possibilities of pedagogical support for the self-development of high school students. For example, studying self-development in their fields of scientific and pedagogical interests, N.V. Kalinina, P.I. Tretyakov, I.A. Sharshova, G.A. Fedotova distinguish the following components of self-development: a set of reflexive, self-regulating component, components of self-knowledge, self-determination, self-realization; self-awareness, self-determination, self-expression, self-affirmation, self-realization, self-regulation; self-knowledge, self-organization, self-education, self-realization; a complex of motivational, value, cognitive, activity, emotional-volitional, reflexive, procedural components [3]; semantic, emotional, and cognitive components [4]. The difference in approaches to the definition of the concept of self-development, as well as the tools proposed for working with self-development, are based on the structural diversity of the components identified by the researchers.

Defining the structure of self-development, we proceed from the fact that self-development is an internal purposeful process that occurs at the initiative of the individual and with the assistance of a teacher, closely related to the acquisition of knowledge to obtain the planned result, aimed at transforming an individual into a subject of their own life, and involves the mastery of behavior, reactions, self-awareness and self-regulation in the course of planning one's own development. Justification of such theses gives us the opportunity, firstly, to single out four mutually complementary components of self-development, taking into account the age and motivational characteristics of high school students (motivational, cognitive-thesaurus, activity and reflexive), and, secondly, to define the process of self-development of a high school student as an independent, internal, positive transformation of a teenager through their mastering of knowledge in a dynamically changing, socially-oriented environment, provided that the student has

an exacerbated attitude to their own subjectivity and reactions of the external environment [3].

2. MATERIALS AND METHODS

The sphere of our scientific interests is the study of the toolkit of pedagogical support for self-development of high school students, aimed at improving the motivational, cognitive-thesaurus, activity and reflective components of self-development. At the same time, we understand pedagogical tools as "a set of tools used in pedagogical activity" [5], and tools as principles, approaches, forms, methods, means, technologies and complexes of various teaching methods [5, 6].

In our opinion, the choice of tools for pedagogical support for self-development is determined primarily by features of the educational process, age characteristics of students, identified structural components of self-development and other significant factors. For example, depending on the approach, the researchers A.V. Ostapenko, O.V. Pikulik, I.V. Ivanova, N.S. Zapuskalovoy, choose reflective activity, virtual networking, virtual educational environment [3], additional education [7], social cooperation as the basic pedagogical tool [8].

Based on the results of research [3, 9, 10], we believe that the formation of personal thesauri can act as a toolkit for pedagogical support of self-development of students. In our research, the personal thesaurus of a high school student is a set of hierarchically structured informational, procedural, evaluative and reflective interrelated fields of knowledge mastered by a student in the framework of the educational program of a high school, and significant for the orientation of a teenager in the surrounding world and for self-development [3].

The term *concept* plays a special role in the definition of a personal thesaurus. Through experience and education, people gain knowledge about the world around them. Concepts are an elementary object of knowledge. In the learning process, the student sequentially goes through the levels of knowledge, gaining a new conceptual understanding of the world. At the same time, the balance of known and unknown concepts is gradually changing, thereby launching the process of self-development. The presence of unknown concepts hinders learning progress and, as a result, self-development. For example, according to Z. Raud, V. Vodovozov, T. Lehtla, the thesaurus is

precisely the list of basic fields of knowledge with structured, controlled relationships of concepts [11].

In further reflections, we are of the opinion that the level of knowledge of students, the development of their intelligence, cognitive abilities and abilities for self-development can be assessed by the personality thesaurus in a certain sense [3].

The use of a personal thesaurus as a tool in the process of pedagogical support for self-development is based on the application of a number of teaching techniques: creation of encyclopedic articles, teaching writing, building taxonomies, composing mini essays with help of key-words, reading aloud, creation of thesaurus pages, development of meta-cognition skills [3].

Within the framework of our article, we will dwell in more detail on the technique of creating pages of a thesaurus dictionary, aimed mainly at the cognitive-thesaurus component of self-development.

The main goal of developing such a dictionary is to develop a personal thesaurus of students as the basis for enhancing their cognitive independence, the development of intelligence and, as a result, an increase in the level of self-development through the interdisciplinary concepts mastered by students, mastery of key subject concepts, scientific terminology. The essence of the thesaurus dictionary is the presentation of concepts, special vocabulary in subject areas for the formation of students' speech competence.

Being built around the semantic significance of a concept, such a dictionary implements a system of generic, or synonymous relations, presenting a network of a definitional type [12]. This type of a dictionary is considered as a way of organizing, introducing and consolidating the semantic structure of subject knowledge in the form of a system of lexical means with their interconnections and relationships.

The specificity of work on a thesaurus-type dictionary includes the following stages: selection of subject concepts and development of the structure of the dictionary; formation of thesaurus schemes as part of a thesaurus-type dictionary by subject area; development of a system of exercises for students to work with a dictionary.

We single out the following main requirements for the thesaurus dictionary: selection of lexical units (in accordance with the requirements of the curriculum); organization and structuring of vocabulary (taking into account the logical and

conceptual connections of a given word, allowing bi-directional work at the word-concept level); user-friendliness of the interface (to ensure the convenience and aesthetics of working with the dictionary); methodology (recommendations for teachers and the availability of information navigation for students); practicality (inclusion of typical exercises); openness (the ability to make changes and supplement educational material depending on the specific learning objectives).

The thesaurus dictionary consists of pages that are created using schematization, including: selection of idioms, proverbs, catchphrases (pick up proverbs, idioms, catchphrases for the words under study from the proposed list / a phraseological dictionary / a collection of proverbs, etc., connect the two parts of proverbs / idioms / catchphrases containing the studied words and choose the Russian equivalent ...); selection of antonyms and synonyms (distribute the proposed words with the opposite / the same meaning in pairs and determine which studied words they refer to; write synonyms / antonyms for these antonyms / synonyms and determine which studied words they refer to ...); selection of single-root words (select suffixes / prefixes from those suggested in the table to form derivative words with the studied word; select suffixes / prefixes from those suggested in the table to form other parts of speech from the studied word); search for associations related to this concept (listen / read the sentence / text with the studied words), search for associations for a given word.

Other pages include determination of meanings of the studied words; selection of phrases (make up phrases from the proposed nouns and verbs; insert prepositions into the proposed phrases); familiarity with the etymology of the word (compare English and French / Latin and other words; find a common root; guess what the meanings of words are; study the etymology of the studied words using a dictionary); the opportunity to give a working definition of this concept, and search for key characteristics (insert the studied words into the given sentences; connect the two parts of these sentences with the studied words).

3. RESULTS

An example of a page of the thesaurus dictionary, developed at the State Budgetary Educational Institution of Middle School of General Education No. 371 of the Moskovsky District of St. Petersburg, is shown in *Figure 1*.
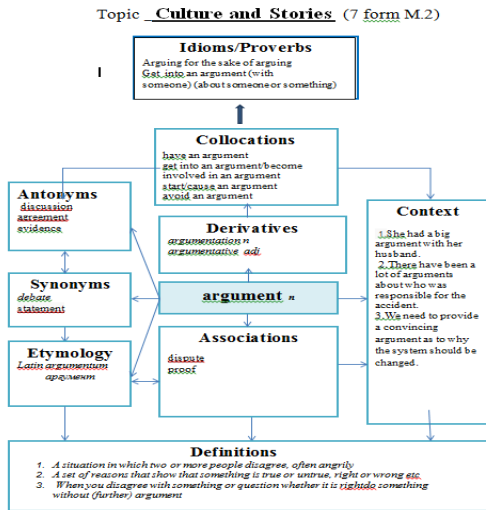
Figure 1. Appearance of the thesaurus dictionary page

Source: [3]

Pedagogical experiment conducted at Middle School of General Education No. 371 with in-depth study of Russian, English and French languages of the Moskovsky District of St. Petersburg in 2014-2020, according to the technique described in our study [3], allowed us to evaluate in practice the effectiveness of using the considered technique.

It turned out that in two years, the level of self-development of students in accordance with the cognitive-thesaurus indicator, which was mainly influenced by the technique of creating thesaurus pages, significantly increased (*Table 1*).

Transposing low, reduced, basic and high levels into a four-point rating scale (1, 2, 3, 4 points, respectively), we see that the average level of the cognitive-thesaurus indicator increased more than 1.5 times: from 1.83 to 3 points.

Table 1. Dynamics of the level of self-development of high school students in accordance with the cognitive-thesaurus indicator

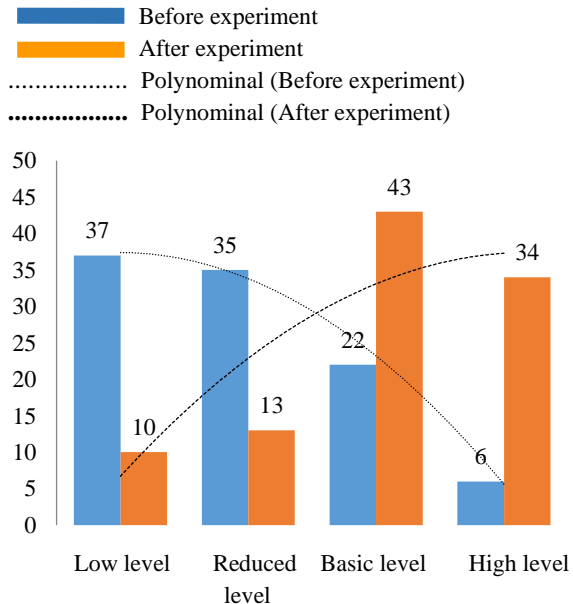| Cross-Section	The Level of Self-Development of Primary School Students in Accordance with the Cognitive-Thesaurus Indicator (number and % of students)				Total (number and % of students)	Average Score
	Low level, 1 point	Reduced level, 2 points	Basic level, 3 points	High level, 4 points		
Before experiment	25 (37%)	24 (35%)	15 (22%)	4 (6%)	68(100%)	1.83
After experiment	7 (10%)	9 (13%)	29 (43%)	23 (34%)	68(100%)	3.0

Source: [3]

4. DISCUSSION

In our opinion, the use of the method of creating pages of the thesaurus dictionary makes it possible to effectively meet the needs of the practice of pedagogical support of self-development of adolescents, developing their personal thesauri.

Separately, we note that in addition to the average level of the cognitive-thesaurus indicator, the distribution of students by levels has fundamentally changed (*Figure 2*).

If before using the method of creating thesaurus pages, most of the students were at a low and reduced level, then after the experiment, most students reached a basic and high level of development of the cognitive-thesaurus indicator of self-development.

At the same time, the percentage of students at low levels of development of the studied indicator decreased by more than three times, which, in our opinion, is in itself a significant result.

Figure 2. Dynamics of the level of self-development of high school students in accordance with the cognitive-thesaurus indicator (%)

Source: [3]

5. CONCLUSION

In conclusion, we note that in the course of pedagogical support of self-development of students of high school, the tools relevant to this process had been studied and applied in practice. The choice of the mechanism for the development of a personal thesaurus in the interests of the process of supporting self-development was substantiated. Using the example of the technique of *creation of thesaurus pages*, we showed the possibility of pedagogical influence on individual components of self-development using the selected mechanism, and proved its effectiveness.

We believe that our experience in the practical use of the pedagogical technique of creating pages of the thesaurus dictionary will help teachers rethink the ideology of pedagogical support for self-development of high school students through the development of their personal thesauri, and acquire some knowledge related to the implementation of this process.

AUTHORS' CONTRIBUTIONS

Roza M. Sherayzina – the idea of the article, the organization of pedagogical expertise, consultations on assessing the effectiveness of the pedagogical experiment. Elena V. Yushkevich – theoretical calculations in the field of pedagogical support of self-development through the development of a personal thesaurus, setting up the experiment that provides for a quantitative assessment of the theses expressed in the article.

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