Formation of skills to work with sources in primary school students

Formación de habilidades para la autoeducación en estudiantes de primaria

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ABSTRACT:

The role of primary school students in their education is becoming more significant at the present stage as an organized educational process increasingly turns into a process of self-education: a student themselves chooses an educational path provided that they act in an elaborate and well-organized learning environment. The key idea is to determine the conditions of use of textbooks and dictionaries when acquiring new information in primary school will contribute to the development of self-directed learning skills and students' self-development.
Keywords: primary school, knowledge, all-objective skills, abilities

RESUMEN:

El papel de los estudiantes de primaria en su educación es cada vez más importante en la etapa actual, ya que un proceso educativo organizado se convierte cada vez más en un proceso de autoeducación: un alumno elige un camino educativo siempre que actúe de forma elaborada y bien organizada. ambiente de aprendizaje. La idea clave es determinar las condiciones de uso de los libros de texto y los diccionarios cuando adquirir nueva información en la escuela primaria contribuirá al desarrollo de las habilidades de aprendizaje autodirigido y al autodesarrollo de los estudiantes.
Palabras clave: escuela primaria, conocimiento, habilidades con todos los objetivos, habilidades

1. Introduction

The Ministry of Education and Science of the Republic of Kazakhstan, Nazarbayev Intellectual Schools, and National Academy of Education named after Y. Altynsarin participated in the development of State Compulsory Primary Educational Standard of the Republic of Kazakhstan. This document outlines the current challenges and defines those innovations that are to be introduced into the schooling practice for primary school students. The document attracts attention with its conciseness and specific guidelines to meet the current challenges:

1. Critical thinking and problem-solving skills.

2. Teamwork and leadership.

3. Flexibility and adaptability to new conditions.

4. Proactivity and entrepreneurial skills.

5. Ability to clearly and intelligibly express ideas both in oral and written form.

6. Ability to search and find information.

7. Curiosity and imagination.

Of special interest is the concept of a system update of primary education, which the document refers to as follows:

- Creation of a fundamentally new, result-oriented model of primary education;

- Laying the groundwork for the "life-long learning concept" implementation;

- Prolongation of primary school education taking into account the psychological and physiological makeup of transition (crisis) periods in child development.

By reference to the above features, the primary school objectives have been redefined in the new context, both with the conventional ones, that is, to teach to read and write, to help to grasp the basics of learning activity methods, to lay the foundation for the spiritual culture of a child, to bring out the best in them, etc., and those clearly targeted at the development of research skills among them:

- To teach to present thoughts in a logical and consistent manner, to identify cause and effect relationships;

- To develop skills to search, examine and interpret information according to achievement age (SCES, 2014).

The urgency of the operating objectives is beyond any doubt, whereby the conclusion about the need for a meaningful and methodical update of the whole process of education in primary school becomes obvious. According to the authors, one of the ways to update it is imparting skills of an all-objective nature to children: they are necessary for proper organization of independent cognitive activity. Such skills include work with dictionaries. The didactic approach to mastering the theoretical and practical lexicographic knowledge is going to be discussed in this article, its goal being to select, systematize and describe didactic conditions forming the skill to use dictionaries as a source of scientific information in primary school students.

Research hypothesis: work on developing independent cognitive activity skills in primary school students on the basis of lexicographic sources will be effective if:

- The learning process is based on modern guidelines of psychology, pedagogy, and developmental teaching and education technologies;

- Necessary and sufficient conditions have been identified to optimize the use of dictionaries at the stage of getting acquainted with new material;

- Didactic and methodical aspects of the optimal use of dictionaries for acquiring new information by primary school students have been determined.

The research objectives (within the framework of the material selected for the article) are reduced to specific actions:

1. To analyze the problems of forming the skills to work with primary source materials in primary school.

2. To identify the scope for the use of lexicographic sources by first to fourth graders.

3. To elaborate methodical recommendations on the use of lexicographic print sources as a medium of teaching organized on the ground of project-based technology.

2. Literature review

It is noteworthy that the status and the path of mastering the "World Cognition" subject,

which is a propaedeutic humanities course and whose grounding is provided in primary school, have significantly changed. Such subjects as Visual Arts, Music, and Technology have been integrated into a new syncretic subject named Art. An integrated study of the first language and literature is organized, and level acquisition of the second and third languages is ensured in accordance with the Common European Framework of Reference for Language Competency Assessment. Based on teacher and psychologist recommendations, didactic conditions are elaborated: there should be enough time for actual brain building in primary school students, according to L.S. Vygotsky, so that "the memory becomes cogitative, and the perception becomes thoughtful" (Vygotsky, 2005).

Also, according to the authors, what is especially important is to include the "Introduction to Science" subject in the primary school curriculum that would be aimed at: development and formation of research, thinking and communication skills; development of curiosity and scientific understanding; formation of practical skills; broadening of outlook on the outside world. There is a section named "Research Skills" in the above-mentioned academic course syllabus that includes the following subsections: 1. Observation. 2. Planning of scientific research. 3. Receiving (recording) and submission (presentation) of data (giving examples). 4. Explanation of the findings.

The goals of mastering the subsections by grades are differentiated in strict compliance with the principles of consistency and material presentation on a "simple-to-complex" basis. Mastering of the "Research Skills" section is focused on theoretical knowledge development, whereby mastering of a whole range of research skills by students is expected. For example, in the first grade, children are to learn how to take simple measurements and set out the observation results. In the second they learn to record observations and set out the results in the form of drawings and simple tables. In the third grade – how to find the similarities and differences and set out the results in the form of drawings, tables, and bar charts (using a computer). In the fourth grade – how to recognize values and set out the results in the form of records, tables, linear charts (using a computer). As is evident, great importance is attached to the development of information literacy in the syllabus, in particular, to mastering ways and means of searching, retrieving, and presenting information, including information given in various forms: text, digit, sound, and image.

The analyzed State Compulsory Primary Educational Standard gives a clear idea that the basis for modernizing the present-day primary education in schools in the Republic of Kazakhstan has been a fundamental change in the objective statement: its developmental function, finding ways to develop motives and the desire for independent knowledge acquisition in students have been brought to the forefront. Educational activity is transformed into creative cognitive work aimed at unlocking the potential of each child, while it is crucially important to properly organize observations made under the teacher's guidance, as well as basic research cognitive activity, whereby the ability of students to work with scientific and information sources is of great importance. In this case, printed products (textbooks, reference books, teaching aids, dictionaries), as well as information on electronic media can act as such sources.

According to A.G. Asmolov, "today, more and more recognition is gained by the fact that the basis for successful learning is general learning activities that have priority over narrow-subject knowledge and skills. In the education system, methods that ensure formation of independent creative educational activity in a student aimed at solving real life problems begin to prevail. Activity-oriented learning is a recognized approach: learning aimed at solving problems; project-based forms of the teaching process organization" (Asmolov, 2014).

According to the authors, general educational activities describe work of lexicographic nature, since it is an integral structural element to any lesson and is defined as a vocabulary. The analyzed scientific literature testifies to the intensity of research on psychological and pedagogical conditions for cognitive interest development in primary school students as an important means of learning activation. Problems of cognitive interest formation in students, research of conditions and factors influencing its formation and development, identification of periods of the most intensive development of cognitive activity – these are by far not an

exhaustive list of those issues that have become the object of close attention of psychologists and educators. Traditionally, as already mentioned above, the issues of forming the reading, speaking, listening, and writing skills remain pivotal at the initial teaching stage. Interest in these issues is updated in the aspect of poly-linguistic training organization concerning all school subjects, and also with regard to the goals and objectives of the "Introduction to Science" subject.

Initiating the research on "Forming the abilities to work with reference sources in students", the authors proceeded from the fact that a schoolchild aged 6-10 is to be trained not only in reading, writing, and arithmetic, but also in terms of skills to search, examine and interpret the collected information in accordance with the achievement age. The teacher themselves, whose actions determine approaches to dogmatic methods, has been an extremely important source, a transformer of new information. It is no mere chance that such high requirements to their professional competence, including organizational, constructive, and communicative skills, have remained so high. But the functions of a modern teacher are not limited to their role as a source of knowledge: today the teacher is both a consultant and a tutor and a corrector of children's cognitive activity. Therefore, the search for new acquisition sources that would meet modern requirements continues and naturally leads to the conclusion about the importance of reproductive methods.

The means of the reproductive method implementation is a textbook – a traditional and positively proven didactic source, to which heightened requirements are applied at the present stage. The textbook performs transpositional, informational, systematizing, and reference functions. It still remains the main component of the learning and teaching support kit; the reference to it in every lesson is a hard and fast didactic rule. However, in addition to the textbook, other reference materials, including dictionaries, are included in teachers' subject portfolios on a mandatory basis.

A contradiction arises between the understanding of fundamental importance of teaching schoolchildren the ability to work with print and electronic sources and limited possibilities of actual pedagogical practice in the use of dictionaries in independent cognitive activity organization; between the need to enhance the cognitive activity of students and the lack of special work on teaching children this important all-objective skill.

In the native language training method, outstanding language pedagogue of the 19th century I.I. Sreznevskiy formulated a fundamental requirement that is presently acceptable and relevant for those who is mastering native and non-native languages. The idea boils down to such language studies that would allow a person to use this language in the future being aware of what difficulties arise when referring to different language units and how to control one's speech. What arouse much interest in the authors was a reference to the extent of knowledge that I.I. Sreznevskiy deemed necessary to have to use a language, as well as the requirements he developed for a) vocabulary; b) knowledge of word combinability; c) the ability to use words, to easily pick them for true and understandable representation of all sorts of concepts; d) the ability to combine words into completed utterances to convey one's messages and feelings; e) the ability to pronounce words intelligibly and correctly; e) the ability to write. Academician I.I. Sreznevskiy prioritizes the task of forming a vocabulary; this same idea evolves in the explanatory notes of many typical syllabi that focus on native and non-native language studies. The emphasis "... is on the word and its meaning, that is, on vocabulary and semantics, on the issues of lexical and grammatical co-occurrence of words, on the algorithm for constructing simple and complex sentences, and on connection of sentences in a text. The emphasis is not on enumeration of linguistic facts, but is instead on their interpretation; on how a language functions and what universal language mechanisms ensure communication" (Sreznevskiy, 1999).

The school and university experience of mastering languages leads to the conclusion that the ability to understand and analyze a text from different perspectives, to properly read and narrate this text in one's own words and to create one's own texts is formed in stages, as well as cultural and language competence formed in students does; one of the first and principal stages is connected with proper organization of lexicographic work. This section finds practical application, as A. Mynbayeva writes convincingly enough in her research

paper (Mynbayeva et.al., 2015).

The research of V.I. Argunova, S.M. Bondarenko, Z.N. Molokhova, M.Yu. Okhlopkova, O.V. Ponomarenko and others address didactic problems of lexicographic work organization in primary school. The scientific efforts of the above authors regard the use of lexicographic sources as one of the methods to expand students' vocabulary. A large number of articles are dedicated to the use of spelling dictionaries in primary school. In the framework of the research, an article by E.I. Sukhushina that unveils the opportunities of methodical work with dictionaries in teaching bilingual children presents some features of interest (Sukhushina, 2016).

If to distinguish conditionally two aspects in lexicographic heuristics – theoretical and practical one, – the works analyzed show that authors are rather interested in the practical aspect, whereby dictionaries are used as one of the ways to develop and improve oral and written communication, including in the organization of independent work. At the same time, in the works dealing with educational process organization in primary school, didactic and methodical aspects of the use of dictionaries as sources of knowledge in primary school are not adequately reflected. One should proceed from the assumption that every object, action, and sign of the world around us gets a name, and a comment of this name is presented in lexicographic sources. Familiarization with them lays the groundwork and is a key factor for mastering the speech competence.

The novelty of the research is that lexicographic sources are described therein as a way of forming the all-objective skill that shapes the intellectual culture of a person. The authors have presented the following point as an axiom: the cultural level of school graduates and the level of their speech development depend on the ability to refer to various lexicographic sources not only aiming to developing the speech, but also to acquiring the world knowledge. With regard to primary school, the use of lexicographic sources in terms of forming the important all-objective skill of knowledge acquisition is being considered for the first time.

3. Methods

The designated format of lexicographic competence allows one to formulate the keynote: definition of educational environment for the use of dictionaries when acquiring new information in primary school will contribute to the formation of skills of independent search work in organization of creative cognitive and scientific research activities.

Various theoretical and empirical methods were used in the furtherance of these goals: analysis of scientific papers devoted to optimization of primary school children's cognitive activity organized with the use of dictionaries, analysis of methodological papers describing methods of work with sources; discrete observations at school, and conversations with teachers.

Thus far, the control and pilot training stages have been completed, statistical processing of the results is in progress, and their description will be a special subject matter in a separate article. The objectives set in this article were related to studying the problems of formation of skills to work with primary sources in primary school, identifying the potential for the use of lexicographic sources and elaborating methodological recommendations for their application in the educational process organized by reference to the project-based technology.

4. Results

The conducted research conclusively proves that knowledge of differentiation of theoretical and practical lexicography problems is intended to help those who study native and non-native languages for them to develop their own approaches to work with dictionaries and, what is equally important, to learn how to create their own vocabularies aimed at independent activity. Theoretical lexicography studies the general theory of dictionaries: it develops principles for vocabulary selection, arrangement of words and dictionary entries, and the structure of a dictionary entry.

A dictionary entry includes a grammatical and phonetic commentary on a word, a reference to its meaning, origin, and functioning scope. Owing to theoretical lexicography, one can learn the system of grammatical and usage labels accompanying the reference to a word semantics. Theoretical lexicography develops the principles of differentiation between encyclopedic and linguistic dictionaries. It defines the purpose of monolingual linguistic dictionaries and, depending on their purpose, the content of dictionary entries (Ilyicheva, 2010).

Practical lexicography ensures the use of dictionaries in native and non-native language studies. Different types of dictionaries are elaborated depending on who they target. There are academic dictionaries that present copious information about a word, and there are learner's dictionaries, the purpose of which is to help a student to properly use a word. In native (Kazakh) language lessons in primary school, children repeatedly resort to an explanatory dictionary, dictionaries of synonyms and antonyms. They get accurate ideas about word-building and spelling dictionaries, and learn about lexicographic reference books.

As for non-native English and Russian language studies, they are based on the use of a special type of dictionaries – bilingual: Kazakh-Russian and Russian-Kazakh, English-Russian and English-Kazakh. In terms of international contacts, bilingual dictionaries become indispensable helpers and companions. The authors proceed from the fact that the skills of reference to a dictionary as a source of information should be formed as early as in primary school and extrapolated into the skills of all-objective type. The authors offer particular ways to organize such work in classes held on the ground of the project-based learning technology.

Depending on the peculiarities of interaction between the subjects of education, individual (personified) and collective (frontal) forms of training organization are singled out. The collective form of training refers to the entire class's work on execution of a specific didactic task; its accomplishment becomes possible with an active interaction between the students. With this form of training organization, children perform a task common for the entire group in step with one another. The collective form of instruction organization unites students of this class by means of a common objective and a shared result of the activity; the teacher who holds a dialogue, asks questions, poses problems, helps to find a way to solve them, and takes on the control function acts as the organizer and the leader of the activity. Their purpose includes a didactically competent organization of students' reproductive independent work in the development of subject matter expertise. The reproductive method includes methods of independent individual work with sources as the major component.

Organizing a personalized form of cognitive activity, the teacher uses a lesson fragment to refer to print and electronic dictionaries. If training material acquisition based on working with hard copy teaching aids has been arranged for a group of students, the other group of students could learn new words using information and computer technologies that are designed to broaden and systematize students' knowledge. At the same time, both reproductive methods and creative techniques are possible to use to arrange information. The use of ICT-based dictionaries makes it possible to make the learning process mobile, strictly differentiated, and individual. This is also facilitated by a lesson being sufficiently equipped with print dictionaries. Undoubtedly, to organize individual work on the use of print reference sources, as well as electronic sources, a preparatory stage is required that is organized by the teacher in the form of team and group work.

At the stage of theoretical comprehension of the problem, the authors analyzed resource packs of information for teachers on reading lesson plans, methods of teaching literacy, the Kazakh language, and speech development in primary school. In the course of pilot training, conditions were identified and those focus areas that are directly aimed at developing source study skills were identified. With the help of dictionaries, students are given the opportunity to:

- Enlarge their vocabulary;

- Learn how to work with several sources of information;

- Learn the lexical meanings of unknown words;

- Get acquainted with the grammatical language norms;

- Fix obscure spellings in minds by means of visual memory.

The right attitude is to be created as early as from the first grade: a dictionary is a separate book that you can ask for assistance. Subsequently, a student is to be gradually acquainted with what dictionary they need to address to solve specific language problems. Moreover, it is necessary to do this both in the Kazakh language and literature-based reading classes, and in the lessons of introduction to the outside world, as well as in the lessons in mathematics. Students convince themselves that the dictionary is such an important book that is indispensable when performing tasks. Thus, second graders get acquainted with the purpose and structure of the following dictionaries:

1. Explanatory dictionary.

2. Dictionary "Spell correctly" (spelling dictionary).

4. Dictionary "Pronounce correctly" (pronouncing dictionary).

In the third grade, a dictionary of set expressions (phrase book) is added thereto, in the fourth grade – word-formative one is added.

Tasks for the practical application of dictionaries are used in classes within the system. The application is ensured on the basis of teachers' recommendations aimed at understanding the content of a dictionary entry. For example: show which dictionary can tell you about correct pronunciation; in which dictionary you learn about distant and close cognates of a word. Finding a necessary lexical unit in the dictionary, understanding the peculiarities of conventional notations, referring to example use of the word in a sentence is interesting, creative work, and children engage in it with pleasure.

Let us turn to a specific example use of the spelling dictionary, upon which a wide range of exercises are built in the textbook. Students are encouraged to clarify the spelling of a particular word, to get acquainted with a spelling or to check words spelled by them. Thus, written assignments with a missed syllable in words is usually of interest.

The explanatory dictionary is used to ensure that a student has looked up the meaning of unknown words that they came across in the textbooks on "Kazakh Language", "Literature-Based Reading", in a literature-based reader, in the textbook on self-cognition. A dictionary can be also used for familiarization with polysemantic words, homonyms, and synonyms.

The use of pronouncing dictionary (the "Pronounce correctly" dictionary) aims at the improvement of pronunciation skills. This dictionary is constantly involved in class: a student refers to this dictionary to make sure the pronunciation of specific words and sounds is correct.

The etymology dictionary is intended to introduce children to interesting information: they will discover some other advantages of this dictionary, in particular as another way to checking the correct word spelling, since the point they will hear from the teacher is important: "If you know what word the word you need derived from, you will not make a mistake!" In the fourth grade, a word-building dictionary comes in to help students in building various parts of speech, in the formation of complex words, and in morphemic analysis.

There is no doubt about the importance of phraseological work in primary school, because the acquisition of set expressions is a gradual and lengthy process. Their presence in the active vocabulary adds special eloquence, felicity, figurativeness to speech, expands the perspective, and encourages leadership in primary school students (Baikulova et.al., 2016).

Dictionaries are rightly called satellites of civilization and national language treasures. Communicative competence of an individual is a key in modern society. It involves a high level of communication culture. However, the ability to select the right words, to correctly pronounce them, to properly construct sentences does not come by itself. Invaluable help is given therein by the ability to work with dictionaries. The authors' observations have shown that all the students' classroom activities conducted by imaginative, creative teachers relying on the principle of perspective are preceded by dictionary work. They use various methods for this but the most effective method fitting the times is to work independently with

dictionaries and reference books.

This type of preparatory work with print reference sources is used on a regular basis, from lesson to lesson, inuring the necessary cognitive creative activity skill. Following the "from simple to complex" principle unfailingly, the teacher purposefully introduces elements of project-based learning technology into lessons. This work can be team or individual, based on a combination of conventional teaching methods and modern information technologies, including computer technologies, which have a positive effect on an increase of cognitive interest in students. Thanks to this combination, the teacher remains an up-to-date, interesting and indispensable subject of educational process, especially if familiarization with new material is organized on the ground of project-based learning technology and ICT use: this combination is, according to the pilot teaching observations and results, a way to efficiently organize the search activity of children (Novolodskaya, 2008).

As a result of project activities, students become active participants in the educational process; the product of their work can have a scientific merit and be a unit of innovation. Children independently discover facts that are new for them and build concepts that are new for them instead of getting them ready made from the teacher or from textbooks; they come to the conclusion that they need to learn a lot to successfully develop a project that is interesting for them. Abilities and skills are formed and developed as children obtain a broader experience of encountering problems that can only be solved through research and development. It is extremely important to focus on creating a student-centered teaching environment, a democratic level of discourse, and interactive forms of communication with children. Also, psychological and educational literature repeatedly emphasizes that "an essential condition for teacher's choice of the most effective methods that optimize teaching is the knowledge of students' real abilities, their brain-building, the development of their will and motives" (Batan, 2002).

In addition, teachers talk about the need for systematic use of active methods, a progressive increase in the degree of children's independence in learning and cognitive activity and a reduction of various types of teacher assistance. All this certainly refers to the application of the project-based method built on partial search or research activities. The investigative behavior of a child is universal and can be manifested in various spheres: communion with nature, drawing, designing, playing musical instruments, socializing and playing with peers and adults, and in other activities. It is also certainly possible in the course of retrieving, selecting, and systematizing scientific information obtained by referring to print sources.

The authors have analyzed scientific projects of third graders at gymnasium schools No. 140 and No. 181 on the following topics: "Why tennis is called a royal sport", "Growing crystals at home", "Healthy lifestyle", "How the brain works," "The most ancient nomad of the steppe – saiga". Surely, both in the choice of topics, in the material layout and in pointing out the prospects for further topic research the presence of a scientific advisor is felt. But where the students' independence was most pronounced is in the abstract part of the projects where children reflected scientific information on their research topics selected on the basis of thematic encyclopaedic dictionaries and reference books. Moreover, at the initial work stage, key (prop) words had been identified to explore the word topic, and terminological vocabularies had been compiled. The teacher made sure that this information was scholarly, properly delivered and formatted according to the requirements for referencing style. In light of the ongoing research, the authors were particularly interested in the issue of working with dictionaries. The acquaintance with the scope of the indicated projects is convincing: modern students are much more likely to resort to computer support and less likely to refer to print sources. The second, equally important conclusion is the need for help from adults – both parents and teachers. This help is associated with changes in the forms and content of extracurricular reading of children (Novikova, 2008).

At the initial stage of the work on a project, the teacher's role is great: what is meant is the vision of the problem, statement of questions, and hypothesizing. The next stage is relatively independent: it concerns formulation of definitions, creation of classifications, organization of observations, experimentation, elaboration of reports, selection of material

for a spoken message aimed at defense of one's own ideas, whereby it is necessary to learn practices of creating presentations and selecting arguments to prove one's own judgments. And this is where reference literature comes to the rescue of a student, whereby they can look up a sample of research conducted by their peers, find other definitions of keywords used by them, clarify the scope of work at each research stage, update information, etc.

According to observations, the use of reference source literature, in this case dictionaries, contributes to better formation of students' skills in problem-solving and search or research activities, while the formulated point is confirmed in various lessons and with various forms of their organization (Matyash and Simonenko, 2007).

A feature of the project-based learning technology with the use of reference sources is that it is a student who is the activity center and who arranges the process of cognition based on their individual abilities and interests. Lessons using dictionaries as sources of knowledge do not only revive the educational process (which is especially important if one takes into account the psychology of primary school age, in particular, a continuous prevalence of visual-figurative thinking over abstract-logical thinking), but also motivate a student to learn.

5. Conclusion

Thus, the criteria for the modern teaching and educational process efficiency are:

• Learning through discovery;

• Self-determination of a learner to perform a particular educational activity;

• The ability of a student to design the forthcoming activity, to be its coordinator;

• Democracy and openness;

• A student's awareness of their activities: how, in what way the result has been obtained, what difficulties were encountered, how they were eliminated, and what the student felt when doing it;

• The joy of overcoming the learning difficulties.

As the research has shown, the use of dictionaries as sources at various lesson stages improves the reading skill and creates an opportunity for independent creative activity organized by the teacher on the ground of the project-based learning technology. The use of dictionaries in hard copy and electronic format allows one to fully implement the basic principles that activate cognitive activity:

1. The principle of equality of positions.

2. The principle of confidence.

3. The principle of feedback.

4. The principle of assuming a research position with a reference to independent cognitive search activity.

The use of sources underlies the project-based learning technology; it is applicable to the acquisition of any school discipline and is especially effective in lessons aimed at establishing interdisciplinary communications, such as literature, visual arts, music, and self-cognition. Creative design becomes an effective means of developing interest in research activities. The key point is to properly arrange the cognitive activity of students and to create conducive environment for new discoveries. The topic chosen for a research should be of interest to the child, whereby they perceive learning as a useful, important matter and better processes the material. The maximum effectiveness in learning process can be achieved if students are immersed in the atmosphere of creative search and research activities.

Work with lexicographic sources (dictionaries) is covered in the methodical literature only in terms of vocabulary improvement and speech development. In this article, work with sources is considered from another perspective: 1) it contributes to the formation of the important all-objective skill provided for in the "Introduction to Science" subject; 2) it serves to influence quality organization of adequate approaches to independent scientific research

activity that begins with a reference base study.

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