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**DEVELOPMENT OF INFORMATIONAL TEXT PROCESSING  
SKILLS IN TODAY'S INFORMATION EDUCATIONAL  
ENVIRONMENT**

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***Abstract***

The article makes a case for developing information skills of students of the general educational middle school amidst dynamic development of information environment, which permeates virtually all areas of personal life and professional activities of every person today. The purpose of this article is to disseminate experience of introducing advanced educational technologies in the learning process, to describe modern approaches to organizing specific work with information resources, and to raise educators' awareness of a problem of presenting texts of new nature in the educational process. Key informational skills necessary to a school student of today have been pinpointed, ways of their development in teaching practice have been shown on the basis of the use of state-of-the-art educational technologies, which help build a positive academic motivation of schoolchildren and construct today's lesson. Furthermore, the article defines the best forms of the teacher-student and student-student interaction. On the back of this study, the most effective technologies have been identified, which correspond to the objectives of the Russian-language course, namely technologies of critical thinking development through reading and writing, debating technologies, web quest technologies, case technologies, and the project-based method. The article might be useful to teachers, curriculum developers, researchers of the educational environment, authors of textbooks, teaching aids and syllabi.

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**Keywords:** Skills of informational text processing, information-educational environment, texts of new nature.



## **1. Introduction**

In the past few decades, hardcopy has ceased to be the only source of teaching information. It must be admitted that in today's educational situation a printed book has been yielding ground to its counterparts in e-libraries that are expanding their inventories rapidly and propose, in addition to requested sources, other literature on the same subject, various auxiliary sources, and provide information and reference support through a varied system of links. Alongside educational resources of basic education, other resources have emerged that offer extended learning opportunities and help satisfy the need of self-education and self-development at any time and in any place (Byungjun, 2017). In that regard, virtual reality becomes a component of the educational space (Kushzhanov et al., 2018; Lei, 2013).

## **2. Problem Statement**

Today's educational space is characterized by accessibility of nearly any sources of information, by versatility of means of getting access to knowledge and cultural values, and by an opportunity to exchange information, including information that has been processed by parties involved in educational activities according to their academic objectives. However, the biggest problem does not lie in the use of a channel of receiving information and not even in finding relevant sources but in the skill to identify, in an abundance of information, what you need to have in order to perform some specific activity, and to absorb the right type of information and in the right quantity to address real-life problems. Schoolchildren have found themselves in a situation where they need to manage ever-increasing volumes of information flows, including those represented in the digital form.

No doubt, all of the above-mentioned peculiarities of today's information-educational environment open up wide opportunities for learning. However, while for those who are interested in the immediate satisfaction of their need for some specific information and do not require its further use for academic or practical purposes it is important to quickly find information, for schoolchildren, as active participants of the educational process, on the other hand, not quick picking and skimming of subject-relevant sources in search of necessary information is a priority (although that is also quite significant), but, rather, effective processing of reliable and the most informative sources, i.e. processing that ensures absorption of a large quantity of information within limited time constraints.

## **3. Research Questions**

Scholars, teachers and curriculum developers worldwide wonder how to organize effective learning, and they arrive at the conclusion that development of informational skills in the information-educational environment of today is not only important but essential. Among other matters, their investigations concern the age in which it is advisable to start using electronic teaching aids in education (Alkhaldeh, Hyassat, Al-Zboon, & Ahmad, 2017; Pasterk & Bollin, 2017), selection of information content (Bulman & Fairlie, 2016), building an individual learning trajectory for schoolchildren (Lapenok et al., 2016), introducing elements of remote learning in school (Nakayama, de Almeida, & Vicari, 2004), required level of a teacher's proficiency in computer technologies (Baturay, Gokcearslan, & Ke, 2017).

Scholars discuss what learning that meets informational and educational needs of today's schoolchildren should look like if we want it to help students build cognitive independence in the information space (Ivanova, 2016).

#### **4. Purpose of the Study**

The purpose of this study is, above all, to identify skills required to successfully harness the opportunities provided by today's information environment, as developing those skills is what educational activities of curriculum developers and teachers should focus on.

#### **5. Research Methods**

Basic research methods used in this study were content analysis, systematizing results of pedagogic and methodologic academic research with the aim of determining the state of knowledge of a particular issue; generalization of the author's experience in creating textbooks and study guides; reflecting on the author's own academic and pedagogic activities.

#### **6. Findings**

The fundamental skills include a student's skill to decode the text content, to describe the nature of factual, conceptual, and — for literary and journalistic sources — sub-textual information; a skill to identify relevancy of decoded information for handling specific educational tasks, for achieving short-term goals, and for implementing long-term plans, addressing strategic academic missions, objectives of self-development and self-education in general. Another skill is equally important, namely the ability to define the information context of the source in question with the aim of enriching its contents with background knowledge that helps broaden the perspective of the studied subject and at the same time contributes to the understanding of details for an insightful grasp of the subject. Establishing contextual links creates an opportunity for further elaboration of the subject and for the use of the studied source as a starting point in grasping the full extent of a particular subject.

Today, the phenomenon of text is in the focus of attention of an array of academic disciplines, various areas of knowledge, and, thus, it is promoted to the status of an interdisciplinary concept (Aleksandrova, Vasilevykh, Gosteva, Dobrotina, & Uskova, 2017). That status is explained, first of all, by the fact that academic knowledge and academic experiences, irrespective of their specifics, as well as creative experiences, are preserved, reproduced and passed from generation to generation basically in the form of texts (Karvonen, Tainio, & Routarinne, 2018; Partagas, Riesgo, & Correa, 2018).

Nobody today questions the fact that oral and written communication takes the form of texts, rather than individual words or phrases, and those texts are shaped like a dialog or a monolog, i.e. a communicative act is essentially an activity of text exchanging or one that involves joint creation of a single text, with texts of new nature becoming units of written communication in the process of that type of communication. Studying the text as an interdisciplinary concept helps grasp the richness of its nature and versatility of the forms in which it reveals itself.

To define texts of new nature, new terms are coined, and their system still needs to be built and described.

Not only the conventional, or linear, text is in the focus of the students' attention, but also the nonlinear text, for instance, the hypertext, which has a branching structure that brings together multiple texts and allows for multiple variations of reading. Active studies of those texts are carried out in a number of countries across the globe.

In the past few decades, researchers have been particularly focused on so-called creolized texts, which have a heterogenous structure that includes, alongside a verbal component, a nonverbal one, composed by means of other sign systems (Zhukova, Tonkov, Komarov, Yaroshchuk,, & Kosolapova, 2017). The term "creolized" is used to denote one-channel texts, such as a playbill, a poster, graphic novels, printed advertising, texts of printed publications. Multichannel texts include multimedia texts, TV commercials, televised and cinematic texts.

Approaching those texts as an object of study and a teaching aid, their use as a teaching aid are dictated by their relevancy in today's life. The process of reading itself is undergoing thorough transformations, its various types are used more actively, for instance, reading from screen (Aleksandrova, Gosteva, Dobrotina, Vasil'evyh, & Uskova, 2017). In that context, the problem of using various means of processing of text information with the aim of its absorption and further use becomes especially relevant, and, above all, it concerns educational and academic texts.

Today's information-educational environment requires that effective pedagogic technologies of teaching methods and techniques of information text processing should be used. The contemporary linguistic and educational situation "makes the objective of cognitive learning more relevant, i.e. not only getting knowledge is essential but understanding the meaning of the studied subject, phenomenon, language unit, and, in general, discourse and culture" (Dejkina, 2016). To make informational and cognitive activities effective, students need knowledge, abilities and skills, which helps them realize the opportunities of self-education and self-development; the mainstay of the latter are the skills of successful informational interaction that includes the process of reception and transmission of information represented in different forms and in different quantities, which, in turn, requires skills of performing effective search, selection, processing, transformation and presentation of various kinds of information.

Amidst those conditions, the problem of development of skills that ensure effective informational text processing is becoming imminently relevant, with informational text processing understood as a "compound activity, which encapsulates both the process of understanding the information represented in the text in different forms and the result of that understanding, explicitly expressed in the form of secondary texts (paper abstract, summary, review, notes, report, presentation, public address)" (Dobrotina, 2016). We regard skills that help successfully perform informational text processing as "communicative-cognitive: communicative — because they are a meaningful component of communicative competencies, and cognitive — in terms of their internal contents and involvement of psychological aspects of "actualizing the thought" in a word, because they are linked to internal speech and its mechanisms — selection and control. They make part of informational skills the use of which helps us perform cognitive universal learning activities, and are represented by two groups of skills: 1) cognitive skills based on logical

operations of analysis, synthesis, comparison, analogy, abstraction; 2) skills of semantic and linguistic information compression” (Dobrotina, 2016).

The informational field in which students find themselves and develop across all the years they study at school is increasingly expanding, and it is important that the opportunities of grasping and processing of incoming information be realized by schoolchildren of different age groups to the fullest extent possible. In order to realize those opportunities, it is necessary to develop appropriate skills in students, which will help them avoid difficulties in learning and overcome limitations of professional growth opportunities, and not only feel protected and able to navigate through an informational field that is expanding at a rapid pace, but also to master various information strata with a specific and strategic end target in mind in order to handle practical matters in an effective manner.

## 7. Conclusion

Diversity of modern technologies helps build today’s classes and lessons, determine the best form of the teacher—student and student—student interaction. The technology of development of critical thinking through reading and writing, debate technology, web quest technology, case technology, the project-based method should be acknowledged as the most aptly suitable to the objectives of a course in the Russian language.

Methodological accents can be shifted to the area of building media literacy skills via development of metalanguage thinking and skills of creative linguistic activities of schoolchildren (Alexandrova, Vasilevykh, Gosteva, Dobrotina, & Uskova, 2018). Use of advanced educational technologies (critical thinking development technologies, case technologies) and informational resources (among which contents of the web portal “National Corpus of the Russian Language” (<http://ruscorpora.ru/index.html>) deserve special mention), work related to the evaluation of the quality of exposition of Russian classical works (for instance, <https://www.youtube.com/watch?v=aPZ3dFUz78>), representation of a linguistic text or the text of a rule in the form of a text of new nature, for instance with hyperlinks, will boost effectiveness of the process of development of informational text processing skills in today’s information-educational environment at Russian-language lessons in school.

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