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**THE ELECTRONIC FORMS OF SCHOOL TEXTBOOKS FOR
HISTORY AND SOCIAL STUDIES**

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Abstract

One of the main trends in the comprehensive education today is an effective use of textbooks on electronic media. One of the main goals is a scientific pedagogical projecting of electronic forms of textbooks for the primary, basic and secondary schools in Russia. The problems to be solved are the risk of excessive information, the need for optimal content selection for the additional learning materials, efficient didactic support for these purposes. The electronic forms of textbooks (EFT) on History and Social studies for Russian comprehensive schools are analyzed in the article. The authors characterize educational resources of EFT both for their use in class and its efficiency to use for the independent work of students and their work at home. The paper also presents recommendations on using EFT for motivating pupils' research activities in studying History and Social studies with their interconnection with the other academic subjects using the opportunity to transit from one textbook to another.

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Keywords: Electronic forms of textbooks (EFT), educational resources of EFT, organization of pupils' activities in studying History and Social studies.



1. Introduction

At the end of the 20th Century the problems associated with the introduction of computer technology in school education were being actively discussed in the international pedagogical literature. At that time issues of students' computer literacy proved to be in the focus of attention. The authors of numerous studies answered the question: *How to teach schoolchildren to work with Digital Media?* (French and Richards, 1994; Sholle and Denski, 1994; Slater, 1995; Quin and McMahon, 1999; Zajda, 2011). Now teachers' attention shifts on new aspects. Among them – the question: *What do electronic data carriers ensure for students' general education, for best results in studying basic subjects?* This article deals with the mentioned question in respect to social-humanitarian disciplines – History and Social Studies.

2. Problem Statement

One of the main trends in a comprehensive education today consists in widening learning sets by including textbooks on electronic media. In the resolutions of the Ministry of Education and Science of Russia an edition of both paper and electronic forms of textbooks for the primary, basic and secondary schools is prescribed (Prikaz MOiN RF 08.12.2014. Ministry of Education and Science of Russia. 08.12.2014). In connection with these obstacles actual tasks now seem to be a scientific-pedagogical projecting of electronic forms of textbooks (EFT) and their effective using in a school practice.

3. Research Questions

According to the definition accepted, the electronic form of textbook (EFT) is an electronic edition, which reproduces the structure, the content and visual design of the printed textbook, and, at the same time, contains multimedia elements and interactive references, expanding the content of this textbook (Prikaz MOiN RF, 2014).

The most important reference points in creating and using EFT are concepts of the normative educational documents – Federal state educational standards and exemplary programs (curricula). In this connection it is necessary to focus attention on the following.

- The functioning standards of general education in RF are based on the system-activity approach, which provides for an intensive and various learning activities of trainees (Federalny gosudarstvennyi obrazovatelnyy standart osnovnogo obshchego obrazovaniya, 2010).

- The standards include the planned results in learning curricula contents, which are: a) personal results; b) meta-subject (meta-disciplinary) results and c) subject results. The first two groups of results and so called Universal Learning Activities (regulating, cognitive, and communicative) are organically-bound with subject results. In totality all mentioned concepts determine the structure and the level of pupils' training. Correspondingly, the main directions of students' work with textbooks in paper and electronic forms are defined.

The analysis of the electronic forms of History and Social studies textbooks, issued in 2015 – 2016 by the leading publishing houses (RF), shows that the following materials are included in EFT as additional components:

- texts (additional and reference information, sources and other);
- illustrations (maps, photographs, pictures, diagrams and other);
- audiovisual components (slides with commentaries, illustrated stories, fragments of artistic, documentary, animated films);
- audio-materials (musical fragments, audio text);
- control materials – tests, training tools.

Thus, we can see a considerable “informational expansion” in school textbooks. At the same time electronic forms give possibilities for flexible operating with texts. It is possible to isolate some fragment of text on the screen and to analyze it separately or, on the contrary, to bring together and to look through different materials in the regime of two “windows”. Interactive elements in EFT (hyper-references, navigation, a possibility of simulation) create additional conditions for various (multi-sided) work of pupils with an information.

Additional contents and technological characteristics of electronic tools increase potential of EFT as an educational resource. Electronic forms of textbooks make it possible to fulfil more effectively such tasks as:

- to develop pupils’ skills to work with different types of social information (sources), as well as an experience of selection and analysis of sources;
- to bring pupils in an active cognitive dialogue “pupil – textbook”;
- to realize the individual approach in studying, the individual educational trajectory;
- to provide a self-control by pupils of their achievements (current and subject control) (Aleksashkina, and Vorozheykina, 2017, p. 30).

As a whole this contributes to reaching planned educational results, required by the standards (FGOS).

4. Purpose of the Study

As to the tasks of studying History and Social studies in comprehensive schools, the comparability of some planned results should be taken into consideration (they are given in the table 1 based on the basic school curricula).

Table 01. Students’ skills for various academic subjects.

History	Social Studies
Skills: to search for, to analyze, to compare and to evaluate information from different sources about events and phenomena of the Past and the present time; to determine and to argue an own attitude to this information.	Skills: to work with socially significant information and to reveal sense of it; to make conclusions and to give substantiated, argued estimations to social events and processes.

5. Research Methods

So, a work with social information, analytical and estimating pupils' activities are supposed in both cases.

As to organizational aspects a complex use of traditional printed and electronic forms of textbooks is common for both named disciplines. The priorities of teachers' work are the following:

- motivating for active learning – cognitive activity of pupils;
- widening of object knowledge and ideas;
- realizing an individual approach in study;
- using various forms of learning work – frontal, in groups, individual;
- developing information competence of students (from skills to work with the object information to universal learning activities);
- combining control tools of printed textbooks and possibilities for training and self-control in electronic forms;
- using resources of electronic forms in pupils' research and project work (Aleksashkina, and Vorozheykina, 2017, p. 34).

Further are characterized special features of EFT and examples of learning situations in studying History and Social Studies.

6. Findings

6.1. Learning situations: History

An educational potential of EFT consists in both various information sources and capabilities for developing learning activities of pupils.

Thus, additional texts not only enlarge the horizon of students, but should be used as objects for cognitive activities of pupils (systemizing and analysis of facts, etc). Biographical data about well-known figures of the national and the universal history help students in composing characteristics of historical personalities.

Fragments of historical sources (chronicles, state edicts, international agreements, correspondence and memoirs etc.) present many-sided images of historical epochs. Analyzing them, students pass a school of historical analysis. Texts from studies of historians help to introduce schoolboys in the field of versions and estimations of historical events, to develop their own experience of axiological activities.

Illustrations (historical maps, photographs, painting and graphic images) are important as sources of visual impressions, an emotional relation to the Past.

The analysis of contemporary electronic forms of History textbooks for Russian schools (2015 – 2016) shows that their use requires a special attention of a teacher. That means an optimal selection of the additional material (sometimes it's equal by the volume or even exceeds the material of a paper textbook). More didactic maintenance is needed as well, for instance, including questions to the sources' texts and illustrations.

Learning situations, based on the acting textbooks and EFT on History, are presented below.

Using additional components EFT while studying a new material on lessons (frontal, team, individual work).

- Cities in the Old Russia. Life of town's folk (Andreev, and Fedorov, 2016). Grade 6.

Characteristics of Old-Russian cities, given in paper textbooks, are usually supplemented in EFT by the following elements: 1) plans or video of Old-Russian cities; 2) audiovisual stories slides about townspeople occupations, trade and crafts, daily life.

These materials give possibilities for creative work of sixth-grade pupils. The class is divided into groups; each of them has to carry out a certain task. For example: 1. Draw a plan of an Old-Russian city, designate and name its parts. 2. What population groups did live in the Old-Russian cities? What were their occupations? 3. Name the basic handicraft specialties, which existed in the Old-Russian cities. What articles, of what materials did craftsmen manufacture? After a brief presentation of the obtained results it is possible to give pupils the task for the domestic preparation: to compose a story about a daily life of one of townspeople groups (on a choice).

Use of resources EFT in an individual homework of students.

Thanks to the additional EFT information the space of schoolboys' creative activities in homework is enlarged considerably. That entails a systematization of historical material, a formulation and explanation of judgments, writing historical characteristics (portraits), preparing presentations and others. As the practice shows, among creative tasks in the field of History prevail characteristics of historical personalities and topics concerning a history of culture and a way of life.

- Old-Russian culture. Grade 6.

Contemporary printed textbooks on History contain, besides the author's text, fragments from literary monuments, statements of historians about the Old-Russian temples, and also a variety of illustrations (photo, miniatures, reconstructions, pictures and others). In EFT this material is supplemented with such components as: 1) slides and models of ancient Russian temples; 2) images of icons, frescoes, mosaics, articles of craftsmen etc.

The contents of printed textbooks and EFT can be used by pupils for preparing (in an individual order or in groups) presentations, for example: "An Old-Russian temple", "On what material and how did people write in the old times", "Old-Russian fine arts", "Handicraft skills in Old Russia".

- *Speransky: the historical portrait* (Solovyev, & Shevyrev, 2015). Grade 9.

In the printed textbook (a topic about Russian political system at the beginning of the 19 century) the following materials are included: Speransky's portrait and biographical information; fragment from his work "Introductions to the packing of the state laws". The EFT contains wider information of Speransky: pieces of contemporaries' notes and of historians' works about Speransky and other. This complex of materials can be used both in class and for home preparing by students essay (presentation) about Speransky. The recommended questions for consideration: Speransky's curriculum vitae; the basic content of his projects; a perception of Speransky's activities in the society and reasons for his dismissal. The obtained results are discussed in the class. As a conclusion it is reasonable to share insights on the place of Speransky in the Russian history of the 19 century.

Use of an EFT information in study projects (study cases).

The idea of a study project (study case) supposes a solution of research tasks, a creation of a certain new product. A work on a study project makes it possible for students to develop skills of goal setting, planning activity, application of their knowledge, search and generalization of a new information, reflection and introspection, presentation of obtained results and others.

The following forms of study projects on History can be carried out on the ground of EFT information: 1) historical reconstruction of events, based on a wider, than in printed textbooks, complex of sources; 2) historical journey (with the use of historical maps and other materials); 3) historical-biographical study (“historical portrait”, “personality in History”); 4) project on a history of native city, region.

An example of study project is given below.

- Study project “Classicism in the architecture of Russia in the first half XIX century: the capitals and province”. Grade 9.

The educational value of this project consists in the correlation of general characteristic of the architecture in Russia in the named period (mainly S.-Petersburg and Moscow) and special features of the artistic culture in the region, in which the students live.

In printed textbooks the general characteristic of the basic architecture styles in Russia in the first half of XIX c. are presented; the outstanding architects are named; photographs of the most known buildings are included. EFT contains a significant additional materials: slides of palaces and monuments, the portraits of their creators, and also slide-show of architectural ensembles (Lyashenko, Volobuev, Simonova, 2016).

Taking into consideration the complex, vast nature of the project, it seems to be reasonable to propose the work to a group of students. As a common plan the following points are recommended: 1. The basic features of classicism in the Russian architecture of 1. half XIX c. 2. Development of Moscow and S.-Petersburg, province cities (types of buildings, their designation). 3. Outstanding architectural pieces, ensembles. 4. Architects: life and art.

At the first stage of the work main achievements in the Russian architecture of the period are characterized (on the basis of EFT information). Then students have to investigate a history of their city, region architecture. That means studying regional literature, collecting visual materials (plans, photograph, etc). The possibility of immediate observing and studying nearby located buildings and monuments inspires in schoolboys a perception of local architectural environment as an irreplaceable part of Russian culture.

6.2. Learning situations: Social Studies

Along with communicating information and providing interactive cognitive exercises that are similar to those applied in the History course, additional components of electronic forms of Social Studies textbooks help achieve a number of significant educational results. Examples of using audiovisual and illustrative material are presented below.

Mobilizing additional EFT components when studying new material on lessons.

While studying new topic, the audio-visual components contained in the EFT could help to organize the pupil's interactive cognitive exercises.

- Topic *A Man Is A Social Being*. (Korolkova, 2014). Grade 6.

The topic is devoted to revealing human social nature, the role played by society in people's everyday lives, the problem of human relationships. Taking into account an age of junior pupils, a segment of a documentary film about a life of penguins is placed in the EFT as an illustrative material. The aspect of appealing to animal life when considering the problem of human social nature can be validated by the fact that in this case, the ultimate objective for the emergence of any animal community, which is the survival of the species, is clearly displayed in the form of a motion picture. The documentary featured in the EFT demonstrates important animalistic aspects like mutual assistance, birds' caring for each other, as well as the role of the flock in protecting and preserving the life of each individual member.

To carry out the exercise, a class is divided into groups. After watching the documentary, the pupils are asked the following questions: 1) What typical tasks does an animal community perform? 2) How do animals behave in a situation of impending danger? 3) Could penguins survive as a species if they did not lead a gregarious kind of lifestyle? 4) What are some of the conditions that ensure the survival of the pack? 5) What are common characteristics of both animal and human behavior? Since the information conveyed to the pupils is not only visual, but is also emotionally saturated, the pupils will be able to identify the behavioral features of animals that are caused by their gregarious way of life and draw parallels between animal behavior and human behavior. At the end of the exercise, the pupils may be asked to prepare arguments supporting the correctness of the statement: "Everyone is really responsible to all men for all men and for everything (Dostoyevsky).

Working with illustrations presented in a dynamic form (slideshows)

The EFT on Social Studies contains many illustrations, some of which are presented in dynamic forms. Among them there are slideshows containing images, selected for a specific topic. Here are some examples of working with this material on lessons or in pupils' homework.

- Topic *"The Russian State Symbols"* (Bogolyubov and Ivanova, 2016). Grade 5 .

The electronic resources on the topic include a collection of 12 images showing how the Russian State Symbols has changed since the mid-16th century to the present day. Working with these images contributes to the formation of creative ideas about the main milestones that have been reached in our country's development, and ensures the concretization of the Social Science material on the basis of establishing inter-subject connections with History. After reviewing the images on the lesson, the pupils may be tasked to collect additional social and historical information for compiling a narrative "History of the Russian State Symbols". Pupils' presentations revealing the content and the sense of Russian State Symbols in different epochs help to create general historical and social context of the Past and the Present.

- Topic *"Free Time"* (Bogolyubov and Ivanova, elektronnoye prilozhenie, 2016). Grade 5.

The electronic annex to the textbook contains a slide show entitled 'People's Free Vocations on the Paintings of Artists'. This includes reproductions of 7 paintings (Bryullov, Polenov, Repin, Manet and others). Each picture depicts a story about people's everyday vocations like spending free time, attachments and preoccupations that are still relevant in our time.

The class can be divided into seven groups, each of them is given the task to make a certain painting “come to life”, to activate it. That means describing its action plot, compiling possible sayings of depicted people, etc. It is worthwhile to listen to different pupils’ opinions about the same picture, and pay attention to the possibility of a variety of opinions. It is also important to explain by what means the artists showed characters of the personages, their attitude to others.

7. Conclusion

In conclusion it is important to mention about additional EFT capabilities in organizing a work with information. These enable a user to do more than simply flipping through pages quickly, reducing or increasing the font, making bookmarks, quickly finding the right topic, highlighting a part of the text, viewing different materials in a double window mode, etc. There is an opportunity to transit from one textbook to another if you need to specify some information. It is easy to look through other disciplines’ textbooks that are loaded on the same tablet. It is very important ability as the subject “Social Studies” requires referring to examples of social relations and various life situations contained in other educational courses (primarily in History and Literature). (Aleksashkina, and Vorozheykina, 2012, Routkovskaya, 2016, p. 146).

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References

- Aleksashkina, L. and Vorozheykina, N. (2012). Uchebnye projekty po istorii v osnovnoi shkole. *Prepodavanie istorii i obshchestvoznaniya v shkole, 10*. [inRus.].
- Aleksashkina, L. and Vorozheykina, N. (2017). Elektronnye formy uchebnikov istorii v osnovnoi shkole. *Prepodavanie istorii i obshchestvoznaniya v shkole, 2*. [inRus.].
- Andreev, I. and Fedorov, I. (2016). *Istoria Rossii s drevneishykh vremen do XVI v. 6 grade*. Moskva: Drofa. [inRus.].
- Bogolyubov, L. and Ivanova, L. (Eds.) (2016). *Obshchestvoznaniye. Grade 5*. Moskva: Prosveshchenie. [inRus.].
- Bogolyubov, L. and Ivanova, L. (Eds.) (2016). *Obshchestvoznaniye. Grade 5*. Moskva: Prosveshchenie. Retrieved from <http://catalog.prosv.ru/item/21563> [inRus.].
- Federalny gosudarstvennyi obrazovatelnyi standart osnovnogo obshchego obrazovaniya*, (2010). Retrieved from (<http://standart.edu/catalog.aspx?CatalogId=2588>).
- French, D., Richards, M. (Eds.) (1994). *Media Education Across Europe*. London – New York: Routledge, 217 p.
- Korolkova, E. (2014). *Obshchestvoznaniye. Grade 6*. Moskva: Akademkniga/Uchebnik.
- Lyashenko, L. and Volobuev, O. and Simonova, E. (2016). *Istoria Rossii. XIX – nachalo XX v. 9 grade*. Moskva: Drofa. [inRus.].
- Prikaz MOiN RF 08.12.2014. (<http://минобнауки.пф/документы/4983>)
- Quin, R. and McMahon, B. (1999). *Theory and Practice of Media Education. In : Educating for the Media and the Digital Age*. Vienna: Federal Ministry of Education, UNESCO. 190 p.
- Routkovskaya, E. (2016). *Elektronnye uchebniki v sostave deystvuyushchikh UMK po obshchestvoznaniyu: myfy i realnye vozmozhnosti / In: Aktualnye voprosy gumanitarnykh nauk: teoria, metodika, praktika. Materialy III Vserossiiskoi nauchno-prakticheskoi konferencii*. Moskva: Knigodel.

- Sholle, D. and Denski, S. (1994). *Media Education and the (Re)Production of Culture*. Westport, Connecticut & London: Bergin & Garvey, 185 p.
- Slater, J. (1995). *Teaching History in the New Europe*. London – New York: Cassel, 180 p.
- Solovyev, K. and Shevyrev, A. (2015). *Istoria Rossii. 1801 – 1914. Grade 9*. Moskva: Russkoye slovo. Prikaz MOiN RF 08.12.2014
- Zajda, J. (2011). Constructivist Pedagogy: Learning and Teaching. *Curriculum and Teaching*, 26(2), 19–31.