



Educational Potential of E-Resources in Distance Learning in the Subject of Fine Arts

Valentina Radeva

“Angel Kanchev” University of Ruse, Bulgaria
E-mail: vtradeva@uni-ruse.bg

The COVID-19 pandemic has necessitated further updates in lawmaking. In Section VI of the Law on Pre-school and School Education, concerning the possible forms of education, there is now a new text - article 115a (New - SG No. 82 of 2020), which indicates how to proceed in cases of extraordinary circumstances when the classroom educational process has to be suspended, namely: "...as far as and if possible, remotely in an electronic environment through the use of information and communication technologies". In the spring of 2020, there appeared to be significant gaps on the part of the various publishers and authors teams, whose commitment was to ensure that teachers could seamlessly work with the necessary volume of media resources to the already existing electronic versions of textbooks in various subjects. The lack of sufficient resources eventually led to the creation of different platforms with a rich base of supporting learning materials - the product of the extraordinary year-long work of many Bulgarian teachers, which resources still support the pedagogical specialists in distance learning in an electronic environment. The report observes the features, obstacles, as well as optimal solutions for distance learning in fine arts. An author's set of multimedia formats for teaching this subject in the primary school stage is presented and a comparison is made with the resources that other author teams have provided in the electronic versions of their books.

Keywords: *primary education, fine arts, distance learning, e-resources, electronic books*

1. Introduction

Teaching art requires the use of some specific teaching methods that have a direct link to the acquisition of knowledge and skills at a practical-applied level. Distance learning in a digital environment is an obstacle that strongly limits the teacher's ability to use some of the most effective visual methods such as demonstration, and drawing on the blackboard. At the same time, in an empirical study conducted among practicing teachers, N. Boyadjieva and M. Velikova report the useful aspects of e-learning. They summarize that the use of information technology in various subjects "breaks the stereotyped traditional way of teaching, enriches the means of perception, awareness, and absorption of learning content, increasing motivation to learn". [2]

The visualization of concrete actions in electronic art textbooks, of the stages to be passed through, of the possible creative solutions are a small part of the benefits without which the independent practical activity of the student risks not be crowned with the same result if a student is put in a situation of remotely understanding all this information from abstract schematic images, pictures or in the worst case to be guided by instructions presented as text.

Already at the end of 2017, with the entry into force of the government standard for the content, graphic design, printed and electronic versions of textbooks, teaching kits and teaching aids, the legal requirements for them were regulated. Here, we will focus only on some components of Regulation No. 10 on cognitive booklets, textbooks, and teaching aids directly related to their electronic versions. Article 38 of the Ordinance clarifies what is to be understood by electronic versions of a cognitive book, textbook, and teaching aid, namely, the electronic version "must include formats that cannot be presented in the printed version". [7]

Later in the same document (art. 39. (1)), it is specified that "depending on its purpose, the electronic version may contain:

1. audio files, videos, interactive animations, 3D visualizations, etc.;
2. illustrations with options to enlarge and focus individual details;
3. virtual simulations of processes, experiments, etc. for training purposes." [7]

Of the formats thus listed, we can point to videos, animations, and 3D visualizations as the most practically useful resources and the closest to a traditional demonstration, whether it is done on the drawing surface, on the blackboard, or three-dimensionally in space (for example, when building a plastic image).



2. Methodology

The monitoring of the presence of media formats in the electronic versions of the art textbooks focuses specifically on the use of two electronic resources suitable for distance learning in a digital environment in the subject of art in the primary school stage, namely: video files, which have a direct link to the practical implementation of the assigned art task, and animations, which support the understanding of the learning material and indirectly support the autonomous work of the student. It is pleasant to note that all the author teams have complied with the requirements of Article 39 (2) of Ordinance No. 10 and all electronic versions are based on familiar navigation and information retrieval patterns, which implies easy use by students without the need for additional instructions. The information is systematized in a table and presents the total number of the two key resources in the electronic versions of all textbooks used in pedagogical practice. The list of publishers is taken from Annex 2 of the Ministry of Education and Science's List of Textbooks and Teaching Sets, approved for use at the primary level for the 2021-2022 school year.

3. Results

From the information summarised in the table, it is evident that the electronic versions of the art textbooks of one of the publishers ("Bit & Tehnika") contain a significant amount of video files and animations, for each of the classes in the primary stage. It is worrying that, at present, some of the e-textbooks for different grades by the other authors' teams do not contain such resources. The authors compensate for these omissions with detailed textual instructions, graphically presented steps or through presentations - tools that, when juxtaposed with the animated image or action or the process captured in a video file, are highly inappropriate and irrelevant to the potential of this version of the textbook.

Table 1. Presence of specific resources in approved electronic versions (data last updated 28.11.2021).

	PUBLISHER					
	"Bit & Tehnika"	Anubis	Bulvest 2000	Prosveta Plus	Prosveta founded 1945	Riva
Grade 1						
video file	10	4	5	8	2	4
animation	4	-	1	1	1	-
Grade 2						
video file	19	-	9	-	1	-
animation	7	-	1	-	-	-
Grade 3						
video file	13	1	-	-	-	3
animation	2	-	1	-	-	-
Grade 4						
video file	15	1	-	1	3	-
animation	-	-	1	-	-	-
Total:	70	6	18	10	7	7

Undoubtedly attractive and enriching students' perceptions are the diverse media formats present in the publishers' educational platforms, which are constantly updated and supplemented, such as photo galleries, virtual galleries, 360 VR panoramas, Google Street View resources, audio tutorials, etc., but especially useful for students' autonomous practical work are mainly video files. It is important to note here that a significant part of the lesson is dedicated to this individual creative activity and specific, short, and specially filmed video instructions are more than necessary. It is difficult to find an explanation for the use of ready-made resources from video-sharing sites, such as YouTube and



similar sites of foreign origin, which do not present purposeful, scientifically and theoretically methodologically sound models for practical imitation with the expected educational value (Fig. 1). Untargeted use of free resources from the Internet introduces rather a confusion and concerns to students that what is being demonstrated is beyond their abilities and that they cannot cope with the representational task. The selection of such resources should be extremely precise, as much of the information in them is not designed specifically for educational purposes. Care should also be taken to ensure that they are relevant to the early stages of learning.



Figure 1. Comparison of borrowed (left) and original (right) video resources supporting instructional content (left: *Bulvest 2000*, grade 2; right: *Bit & Tehnika*, grade 3).

Although inappropriately filmed videos are found in all publishers' textbook e-resources - in some of them they are occasional but in others, they are common practice - it is right to note common mistakes that should be avoided (Fig. 2). The highlights could assist teachers' good judgment in seeking and using additional supporting visual material from the Internet. Information in a video, indicating a specific sequence of actions and ways of using different visual materials and techniques, is much better perceived, understood, and applied by students (especially in the case of distance learning in a digital environment) when it has the following characteristics: the video signal is of high resolution, which reflects on the quality of the frame; the frame frequency and speed are high to make the movement look more fluid and natural; the light flow has the necessary parameters and direction to avoid contrast shadows in the picture; the position and the angle of the video-recording should offer the easiest possible perception by children (frontally) as well as avoiding foreshortening that leads to "distortion" of the reality and deformations; to avoid the presence of an excessive object or such that prevent the transitory assimilation of the important information.



Figure 2. Examples of inappropriate presentation of visual information in a video (left: *Bulvest 2000*, grade 2; middle: *Prosveta - Sofia*, grade 1; right: *Riva*, grade 3).

4. Conclusions

More than ever before, contemporary times suggest, and pedagogical practice in distance learning identifies a need for an even more tangible presence of appropriate supporting resources. Extremely useful formats for electronic versions of art textbooks are video files and animations, which aim not only to bring greater clarity and visuality to the presentation of educational content but also to activate cognitive attitudes and confidence in children in the context of informal learning in the conditions of distance learning in a digital environment. In this regard, interesting interpretative nuances are found in item 3 (New - SG 39 of 2020, effective from 28.04.2020) to § 1. of the Additional Provisions of Ordinance No. 10, which explicitly defines that an electronic product whose content is completely identical to the content of the printed edition of the draft textbook or teaching kit is defined as an "E-readable draft textbook or teaching kit". [7] These necessary clarifications probably underlie some, scarce media formats, electronic versions of textbooks, remaining closer as it were to electronically readable ones.



References

- [1] Angelova, L., Legkostup, P., Mihaylova-Nedkova, G. & Pelovska S. (2016-2018). Textbooks about Fine art for 1st – 4th grade. Sofia: Publishing house “Prosveta-Sofia”
- [2] Boiadjeva, N., Velikova, M. (2020). Application of innovative methods in school activities according to teachers in Bulgaria. Sofia: Education and technologies, 11/2020, 131-137
- [3] Damyanov, B., Zankov, O., Markova, D., Balkanski, D. & Hristova, O. (2016-2018). Textbook about Fine art for 1st – 4th grade. Sofia: PH “Klet Bulgaria-Anubis”
- [4] Dvoryanov, O., Vitanov, L. & Dvoryanova, L. (2016-2019). Textbooks about Fine art for 1st – 4th grade. Sofia: PH “Riva”
- [5] Nemptzov, D., Ivanova, P., Popov, Tch. & Krалеva, D. (2016-2019). Textbook about Fine art for 1st – 4th grade. Sofia: PH “Klet Bulgaria-Bulvest 2000”
- [6] Ordinance №5 of 03.06.2016 for general education, promulgated in the State Gazette, issue 95 as of 08.12.2015
- [7] Ordinance №10 of 19.12.2017 for knowledge books, textbooks and teaching aids, promulgated in the State Gazette, issue 102 as of 22.12.2017
- [8] Radeva, V., Petrova, N. & Dimitrova, Z. (2016-2019). Textbook about Fine art for 1st – 4th grade. Varna: Publishing house “Bit & tehnika”
- [9] Tzanev, P., Karapanteva, R. & Strashilova, G. (2016-2019). Textbooks about Fine art for 1st – 4th grade. Sofia: PH “Prosveta Plus”