The perception of various media formats of educational content by the youth audience

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Abstract. The development of information and communication technologies, along with the influence of restrictions caused by the global coronavirus pandemic, leads to a revision of current education technologies, in which the format of presentation of educational material plays an important role. The format of the presentation of educational content directly affects the involvement of students in the process of obtaining information, which, in turn, contributes to better memorability and assimilation of the material. The article attempts to assess the perception of the youth audience representatives of various formats of content presentation used in the learning process: visual, auditory, text. It is also made an attempt to determine the most and least popular formats among the audience. The research is based on a questionnaire of respondents with experimental elements. During the survey of 250 respondents, it was revealed that the video format is a priority in terms of ease of perception, memorability, and ease of presentation of the material.

1 Introduction

Knowledge and information are the determining factors in the development of society, with communication technologies play a crucial role. The development of information and communication technologies has made it possible to expand opportunities in almost all areas of activity, including in education.

Today, the most promising way of training specialists are education technologies that combine innovative training forms [1]. The emergence of new, relevant content presentation formats makes the learning process more interesting and conducive to better memorization of the information.

However, there is still the question of which format of content delivery is more effective in terms of learning new knowledge by students. The global pandemic, which contributed to the active development of distance learning [2,3], has brought to the fore interactive and video lectures as a new form of information presentation.

However, the difference in approaches to the content presentation is extremely large here too. The representatives of Russian education in most of the training process use the format of traditional video lectures, where the lector directly addresses the audience without actually leaving the screen.

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Given the time of such lectures, about 40 minutes, it can be stated that the attention of listeners, in most cases, dissipates by the middle of the lecture and so the video lecture becomes a classic lecture in audio format, with small additions in a text format.

At the same time, representatives of foreign education in the framework of their video lectures actively use insets of various video materials, without concentrating the attention of students on the figure of the lecturer. The change of activity taking place on the screen forces students to concentrate on the presenting content, which, in most cases, has a positive effect on the process of memorizing the information.

Recently, approaches related to the denial of lectures as an effective teaching format have begun to dominate in the field of higher education. However, according to research conducted at South Ural State University [4], the priority format for assimilating lecture material for most students of technical specialties is "classical" lectures (55% of students), when students attend lectures and independently observe the main points. "Advanced" forms of lectures such as printed notes, electronic notes with video lecture, lecture-dialogue prefers 28%, 4%, 9% of students, respectively.

The absolute majority of students (88%) are in favor of lectures. At the same time, among the students surveyed, the majority (48%) regards lectures as an interesting source of new knowledge and skills; they note that they enjoy attending lectures. A significant proportion of students (40%) looks at lectures from a practical point of view and regards it as a convenient tool for successful study. It makes one seriously think about the fact that among university students studying in technical specialties, there is an extremely low (4%) demand for electronic notes and video lectures, which are positioned in the general public consciousness as new, effective and “advanced” formats for organizing the educational process.

At the same time, the results of the study [5] clearly speak in favor of active teaching methods. On average, 34% of students did not pass the exam in groups with classic lectures, and only 22% in groups with active learning.

Obviously, one of the factors of successful learning is memorization of the information, which directly depends on its perception. In turn, the perception of the information is influenced by the involvement of students in the process of its obtaining, depending, among other things, on the format of the content presentation [6, 7].

The issues of using new learning formats are considered in the works of K.J.Dickinson, K.E.Caldwell, E.A.Graviss, D.T.Nguyen, M.M.Awad, J.Olasky, S.Tan, J.H.Winer, K.Y.Pei [8], Marie Maertens, Mieke Vandewaetere, Frederik Cornillie, Piet Desmet [9], Faiz Tuma [10]. The introduction of information technologies into the educational process is discussed in the works of Alla L.Nazarenko [11], Marina Cherkasova, Vyacheslav Sirotkin, Alexander Kostyukov [12]. The issue of using educational content is considered in the works of Michael Klenner [13], Douglas Sanford [14], Elena Rivo-López, Jesús F.Lampón, Mónica Villanueva Villar, Carla Miguez-Álvarez [15]. The possibilities of using innovative forms of content presentation are shown in the works of Stephen Knox [16], Deborah L.Linebarger [17].

2 Materials and methods

The study of youth audience perception of various media formats of educational materials implies the need to obtain a significant amount of information, which is extremely diverse and often contradictory.

The empirical part of the study is based on the questionnaire of respondents with the experimental elements.
The research was conducted on a sample of 250 students of Don State Technical University. As part of the study, respondents were asked to familiarize themselves with various formats for submitting content, and then fill out a questionnaire.

The study is a pre-testing of the youth audience perception of the project by Rossiya Segodnya media group - “Nuremberg. VRdict of peoples”. The empirical basis of the study was made up of materials compiled in preparation for it.

Information processing was carried out by using statistical methods.

3 Discussions and results

Content as a phenomenon is characterized by purpose, originality, information itself and form of presentation.

At the same time, the purpose of the content is understood as its target orientation – entertainment, news, educational, etc.; originality – the degree of its uniqueness; form of presentation – the using format: text, audio, video.

The working hypothesis of the study was the statement that the most effective in terms of perception and memorability of the information is the video format of content submission, since it:
- allows to diversify the educational process;
- provides more opportunities for students to memorize educational materials, due to the use of two perception channels, which leads to a more complete immersion;
- maybe preferred by students to other formats due to its novelty and ease of perception.

Also, one of the goals of the study was to determine which format of content presentation is more interesting to respondents: video, text or audio.

To comply with the experimental conditions, respondents were offered the same material presented in different formats, which made it possible to exclude heterogeneity of content from the number of factors affecting perception.

Respondents were asked to evaluate such indicators of the proposed formats as:
- the ease of content perception;
- the memorability of the material;
- the interest in the material;
- the convenience of material submission;
- the desire to receive content in a specific presentation format in the learning process.

The conducted research allowed obtaining the following results.

Thus, the video format of content submission is the easiest to perceive, according to respondents (Figure 1).
Fig. 1. Respondents' assessment of media format perception.

Obviously, this fact is due to the parallel involvement of both the visual and audio channels of receiving information.

According to the respondents, the material is most easily remembered when it is submitted in video format, the text format is in second place (Figure 2).

Fig. 2. Respondents' assessment of memorability of the material in the media format.

An interesting fact is that the material in the audio format is considered equally easy to remember and hard to remember by approximately the same number of respondents. It makes us to suggest that this format may be reinforcing in the learning process, but not the main one.

Also, the most convenient for respondents is the material submitted in the format of video and text (Figure 3).
Fig. 3. Respondents' assessment of the media format convenience.

The most priority for respondents is also the material submitted in the format of video and text (Figure 4).

Fig. 4. Respondents' assessment of the media format priority.

The majority of respondents (92%) are ready to recommend the video format to their friends (Figure 5). Also, more than half of respondents (64%) are ready to recommend the text format of the material. Less than 50% of respondents will recommend an audio format.

Fig. 5. Respondents' assessment of readiness to recommend the media format.

The overwhelming majority of respondents (89%) would like to use video format in training. At the same time, it draws attention to the fact that almost 40% of respondents would not like to receive training materials in audio format (Figure 6).
Fig. 6. Respondents' assessment of the relevance of media formats in the educational process.

The ranks given by respondents when assessing the priority of formats demonstrate that more than 50% of respondents consider the video format to be a priority, the text format is in second place, and the audio format is in third (Figure 7).

Fig. 7. Respondents' ranking of media formats.

Thus, it is obvious that the respondents were most receptive to the video format of the educational materials presentation. It makes us suggest that this kind of format has the greater degree of involvement that makes it more effective in the learning process.

4 Conclusions

Thus, the conducted research has shown that the video format is a priority in terms of ease of perception, memorability of the information, interest in the presented material and convenience of its presenting. The same format is highlighted by the respondents as the most desirable for further training.

The last place of the audio format for all analyzed characteristics suggests that the format of classical lectures, where the role of "audio translator" is assigned to the lector, in the absence of an active learning component, can lead to a loss of interest and concentration of audience and, as a result, to worse memorization of the submitted material.
Moreover, the presentation of content in the video format can be more convenient for lectors, due to the fact that it is a finished and packaged product – so it doesn't need the detailed explanations.

Thus, it is obvious that the use of video materials in the format of "classical" lectures will make the learning process more effective.

References