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## THE EFFECT OF APPLYING THE ADVANTAGES OF THE INFOGRAPHIC FORMAT IN THE PROCESS OF MEDIA LITERACY EDUCATION

**Hilola Ibragimova\***

\*A second level Independent Researcher,  
 Uzbek University of Journalism and Mass Communications,  
 UZBEKISTAN

### ABSTRACT

*It should also be noted that teaching the new generation in the old way does not justify itself; therefore, the textbook content of this generation should be supplemented with various anthologies, laboratory workshops, a set of assignments, multimedia resources and other innovative technologies, in addition to “teaching just to read”. Infographics are also a fairly effective format in these processes. This article describes in detail the methods and effectiveness of the use of info graphics in the process of media literacy education.*

**KEYWORDS:** *Media, Media Literacy Education, Infographics, UNESCO, Oxford Encyclopedia, Electronic Media, Mass Media, Digital Media, “Ted Talks”, “Data Redrawing”, QR-Code, “History Of The World”, DELL Company.*

### INTRODUCTION

The world today cannot be imagined without the media. The media plays a special role in human life. Whereas in the past people used to wake up, wash, sit at a table and read a newspaper or get information on the radio and television, now we dive into the information space through gadgets before we even have time to open our eyes. Every second new piece of information arrives. We have a phone, a tablet, a TV in our house, a radio in our car, a computer in our office, all of which does not allow us to be disconnected from the media world, even if only for a little while. Today we have become the inhabitants of the “media island” and we can’t even imagine that there could be a different life outside of this island; and we can’t imagine living without the media.

### **The Main Part**

"Media" is derived from the Latin word "media", which means 'middle ground' or 'intermediate', more precisely "common information intermediary".

As it developed, the media has made people's lives easier, and began to satisfy the demand for information in any way; it began to play an important role not only in the form of information but also in the formation of knowledge and skills. At the same time, the proliferation of information channels, in particular the emergence of the Internet and the freedom to disseminate information on it, have brought out the formation of citizen journalism as a factor play an important role in society; this has made it necessary for people, especially young people and children, to develop the ability to select and analyze data, to distinguish reliable and accurate information. It is on the basis of this task that a new concept of media literacy education has emerged.

The main stage in the development of media literacy education dates back to the end of the last century. During this period, a very convenient and fast channel of information transmission, the Internet and mobile phones, developed. Such factors as democracy and the convenience of mass communication, the difficulty of controlling this situation by the state or other organizations, the popularity of technology devices began to affect the social and economic life in communities.

According to the Oxford Encyclopedia, "Media literacy is the study of the media. Media literacy education is linked to the media texts being created and disseminated. It develops the ability of learners to analyze to interpret and evaluate the content of media texts. The study of media is usually done in a practical way, i. e. in connection with the creation of media texts. Media literacy education serves to increase media literacy through the study of the media."<sup>1</sup>

UNESCO defines media literacy education as follows: media literacy education is the study of the theory and practice of knowledge in modern media.<sup>2</sup>

In 1982, UNESCO adopted the Declaration on Media Literacy Education. According to this, "Media literacy education is closely linked with all types of media (print, graphics, audio, screen, etc.) and various media technologies. It educates people on skills such as understanding how to use mass communication in the social consciousness, mastering the ability to use the media while communicating with other people.

The word "media literacy education" first appeared in the territory of the CIS in the 80s of the last century. Although this concept has not been widely used in Uzbekistan, there have been various opinions and researches on media literacy education. In particular, in the dissertation of Sh. T. Khalilova, defended at the Uzbek State University of World Languages in 2001 on "Pedagogical conditions for the use of mass media in the moral and aesthetic education of students" (on the example of Uzbek radio broadcasts), the establishment of a radio studio at school, the organization of trainings "Young Orators", "Young Correspondents", as a result of which students raised the issues of listening to the media, including radio and active participation in it, the formation of knowledge, skills and abilities. Similarly, K. A. Farfiyeva's dissertation on "Peculiarities of the formation of social perceptions in students under the influence of the media" (on the example of television), defended at the National University of Uzbekistan named after MirzoUlugbek, studied the influence of the media on public opinion.

Clearly, the concept of media literacy education is broad; its definition is not limited just to the knowledge that shapes the ability to use the media. A. A. Jurin defined this concept within three categories:<sup>3</sup>

1. A pedagogical subject that studies and teaches the impact of the media on children and adolescents and develops theoretical issues, preparing students for an encounter with the world of the media.
2. A joint practical activity of teachers and students, preparing children and adolescents to use the media, to understand the role of the media in the world.
3. A part of education that provides knowledge about the role of the media in understanding the world and its cultures and develops the ability to work effectively with media information.

The breadth of the concept of media literacy education, which also includes the educational nature of the media, can be seen through its directions. Russian scientist A. Fedorov, who has studied media literacy education in depth, divides media literacy education into the following main areas (perceptions):

1. Media literacy education prepares future professionals for the world of press, radio, television, cinema, video and the Internet - journalists, editors, directors, producers, actors, cameramen and others.
2. Media literacy education prepares future teachers who conduct media culture courses in educational institutions.
3. Media literacy education is a part of general education of pupils and students studying in schools, secondary specials, (vocational) institutions, higher educational institutions or independently functioning centers (special, voluntary, circle, etc.).
4. Media literacy education in other educational establishments and centers that organize meaningful leisure time of students (houses of culture, extracurricular activities, aesthetic and artistic education, clubs in the community).
5. Distance learning for adults, students and pupils using the press, television, video, DVD, Internet.
6. Independent, continuous media education. (This direction is theoretically practiced throughout an individual's life).

From the aforementioned considerations, it can be clearly seen how important the media literacy education is. In a sense, media literacy education helps the public to keep pace with the times, with the news in the media. Because of this, media literacy education itself should be transmitted to students and the audience in new, modern formats. Therefore, through research, we will look at how effective the new format – the infographics can be in media literacy education.

Medialogists studied media and media technologies and conditionally divided them into 5 types.

1. The first media is writing.
2. Print media - printed publications, lithography, and photography.

3. Electrical media - telegraph, telephone, voice recording.
4. Mass media - cinema, television.
5. Digital media - computer, the Internet.<sup>4</sup>

The latest generation media types, such as television and then the Internet, have reached an audience faster than their predecessors. Many researchers point to visualization as the reason for this. Indeed, visuality is one of the most important elements of resource attraction.

Because of their visuality, Infographics have become one of the best formats of communication today, as well as their ability to present information in a concise, brief, meaningful way, that's, in an exact way that an individual wants to express a thought or an idea.

## RESULTS AND DISCUSSIONS

Dividing the use of infographic into media education into two categories can help to shed light on the topic more clearly and comprehensibly. In media literacy education, infographics can be used both in teaching media and in transmitting knowledge through the media.

In teaching media literacy, it is possible to use infographics as a practical task for students in explaining media topics and creating textbooks on media literacy education.

Today's students' attitudes and requirements for the acquisition of knowledge and skills have changed significantly; unlike the previous generations, today's students get bored of "dry" texts quickly and can't just hold their attention by using only these materials. According to research: A large part of the human brain provides the capacity to process visual data – the ability to see. In fact, 50% of the brain depends on the function of receiving information through vision.<sup>5</sup>

Experimental practices also confirm that the brain sees and absorbs the most basic information via visual sources. It is only natural therefore, that the saying: "a picture is worth thousand words" is common.

"An ordinary person can remember seven numbers in a sequence, " said Webster. "But this person can also remember a thousand numbers in a sequence if the figures are presented in the form of a line graph."<sup>6</sup>

Therefore, the use of infographic materials in future media lessons will help to attract the attention of the student. It also enhances the ability to understand infographics in the media.

The article "Infographics in training" on the site synergycorp.ru provides the following claim on the use of infographics in the teaching process: "Training courses created with the help of infographics meet several important requirements simultaneously: they train the student to absorb the maximum amount of information in a short period of time, to demonstrate freedom during the lesson, and to develop memory and visual perception without experiencing boring 'squeezing'."<sup>7</sup>

While the information in the infographics is easy to retrieve, it requires the learner to concentrate well on the visuals provided. Without this, the information given in some types of infographics cannot be easily assimilated. For example, the infographic "Extinct and Fossilized" in the book "History of the World"<sup>8</sup> contains a lot of information. If this information was given in a text form, it would be at least 3 to 4 pages in length, in which a few pictures would have need

necessary to accompany the text. This would have made it difficult for the reader to form an imagination. The learner would have to blindly assimilate this information. In the aforementioned infographic, however, the reader searches for each piece of information on his or her own. He looks at the period, tries to analyze the type of animal, its structure, and how it differs from the animals before and after it. This ensures that the information the reader receives is well stored in memory. At the same time, the student develops the ability to analyze the information provided.

Practice has also confirmed that infographics are effective in the learning process and give a number of positive results. For example, Gary Rob Lamb and his colleagues talked about how to add infographics to science education in high school. First of all, their main goal was to form information literacy in the process of teaching graphical data representation. Infographics have been used in a variety of activities (e.g., “reading aloud and thinking”, “data redrawing”) and in presenting own projects by high school students. In particular, in a “reading aloud and thinking” lessons, teachers will display infographic materials and explain how to read the data, interpret their meaning, and understand the message contained (hidden meaning). In a “data redrawing” class, students will be able to visualize the ideas they see.<sup>9</sup>

Indeed, infographic preparation can also be used in the educational process as a separate pedagogical technique. We know that the "cluster" method is widely used among pedagogical techniques. Creating infographics can be seen as an improved version of the cluster method. In this case, the teacher with students can prepare an infographic in the form of a seminar based on the topic.

Infographics can also be given as a special assignment for students. However, first of all, it is necessary to explain to students the essence of infographics, its difference from ordinary visualization. It is not just an image given as a form of information such as visualization, but it carries additional information. In order to work infographically independently, first of all, it is necessary to study the topic in the textbook in depth. This prevents the student from merely doing a superficial study of the subject. Then the idea of infographics is considered. This helps to enrich the reader’s imagination. Often in hopes that students can master the topics well, the teachers ask students to take notes of the topics.

Teachers often claim that taking notes is equivalent to reading a book three times. In contrast, creating infographics requires students to work on the topic in the same way as they read it 30-40 times. They worry about how to present each piece of information on the topic. This allows one to re-read the information and think about it relentlessly, so that no information is neglected in the preparation of the infographic, which certainly leads to the desired outcome that the reader fully masters the topic.

In the West, even in ordinary schools, teaching using infographics has become commonplace, says the article "Infographics in training" on synergycorp.ru. The article also contains the following sentences. “DELL has conducted research among students and faculty at universities in the United States, China, and Germany. The results showed that 9 out of 10 respondents said that the use of infographics in the course would increase its effectiveness. Eighty-two percent of respondents said it would be better to use these technologies more than they do today.”<sup>10</sup>

The important role that the infographics play in the process of media literacy education is well reflected in and confirmed by the opinions of Canadian scientists. According to them, "Giving assignments on infographics can greatly inspire students to make a good use of all the communicative skills without a direct help of a teacher. It's also a real exercise in digital communication skills." According to the researchers, this is content formation and content production. In the preparation of infographics, the ability to critically analyze the content of information (or content analysis), to identify the characteristics and needs of the audience, and to design the message is developed. All of this enhances the level of professional communication skills in any field."<sup>11</sup>

Another senior class teacher who uses infographics in her classes, Carissa Peck of California, says that she instructs her students to prepare infographics as an alternative to traditional essays. She also asks the students to analyze each other's infographics at the end of the lesson, sometimes noting that several infographics are combined and generalized.

There are also a number of advantages to using infographics in textbooks.

With infographics, the textbook will have a colorful and unusual look. "The brain is designed to receive what sets it apart from others. We think of the brain as a computer's hard drive. For it to work actively and efficiently, the memory must not be filled to capacity. To fully maintain optimal speed, the brain filters all the information that enters and as soon as it receives the information, it removes about 99% of the information from the sensory organs. The main criterion in this selection is that the information received is different from the information normally received by the brain before. The brain's attention is drawn to new and unusual things."<sup>12</sup>

## CONCLUSION

Infographics is a format that meets the needs of the modern audience. In today's information age, it is considered very difficult for people to obtain textual information, especially when the material contains large amounts of it. Now, despite the level of interest the information appears to generate, most people become bored of it after reading the first few pages, and most of these people do not make the effort to read the information to the end or go to the end without reading the information in the middle. Scientific experiments have proven that it is possible to hold a person's attention for only 10 minutes, regardless of how interesting the material can be.

Infographics help to obtain and absorb pieces of information easily. Also, pictorial information is received faster and easier than text. "Every letter in a word is a symbol. To read a text, the brain must first unravel the shape and sound of the letters stored in memory one by one. Then the sounds in the brain are connected and imagined how the word is formed. It is necessary to draw conclusions by imagining how the sentence is formed after the words, then the paragraphs are formed, and the content of the general text. Although this process takes place within a few seconds, if we compare it with the process of image reception, it is observed that in the textual form, there is more mental strain. Therefore, using infographics, in a sense, can physically simplify the understanding and reception of the information for the audience."<sup>13</sup>

Because infographics present the information clearly and concisely, the process can prevent possible misunderstandings and misconceptions from arising. To put it simply, for example a word of apple does not describe what it looks like (in most cases, it is a general word without a



specific detail or details; In fact, it is not possible to interpret every object. ) Because only the word itself is presented, everyone sees an apple of a different shape and color. In contrast, when the object is presented in the infographic, because the author's image is illustrated rather than stated, the audience gets the same image as the author is imagining.

It also has the advantage of firmly storing the data in the brain and of long-term storage of it there. 70-90% of image information is stored in human memory. This also prevents the books from becoming too extended or bulky.

Infographics can also play an important role in predicting longevity in media literacy education processes. Because it is able to store large amounts of information, it enriches them in school textbooks with information learned in previous classes, allowing the student to constantly revisit even old topics.

For example, in the literature on media literacy education, the presentation of chronological infographics about the stages of media formation, video infographics about media types, or interactive infographics allows the reader to get better acquainted with the world of media.

Just as infographics can be used in all fields, it can also be used in all science textbooks. We also know that today textbooks provide links using QR-codes, in which way readers are given a possible view of the infographic on a topic in the textbook or a video infographic on the infographic itself. This will help the reader to take an interest in the subject and learn more about it.

Textbooks can be used to prepare infographics on each topic or on large general chapters. That is, on the basis of information on each topic separately and combining them into a larger chapter.

The same applies to infographics for electronic textbooks. It is known that an e-book read with the help of gadgets quickly tires the eye. Therefore, they should be designed to be quick and easy to accept. They are also created to avoid large volumes of text. In this regard, infographics are useful in electronic textbooks.

In printed publications, it is possible to use mainly simple types of infographics. If we look at foreign textbooks, most of them are "ted talks" (video lectures of famous and smart people) or various videos in the form of audio and video are put on the book on the disc. In this way, video infographics can be presented in addition to printed publications. This means that simple and video infographics can be used in printed textbooks.

In e-textbooks, it is possible to combine simple, click infographics, if the book is intended for online use, in which case it can be both interactively and through the possibility of transition to video infographics.

Because of this specific feature, infographics are useful in all respects for media literacy education processes; in fact, enriching the media literacy education processes as well as the textbooks with modern materials is the main factor in determining the effectiveness of those processes and text books.

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