VISUAL LITERACY FOR THE 21ST CENTURY: THE REQUIRED ABILITY TO UNDERSTAND THE POWER OF MODERN IMAGES

Bozena Supsakova

Faculty of Education, Catholic University in Ruzomberok (Slovakia)

Abstract

The presentation elaborates on the theoretical concept of visual literacy, which is applied to the contemporary digital age. It gives special attention to developing and cultivating the visual literacy of children who, through television and social networks, in particular, YouTube (video) and Instagram (pictures), „consume" today mainly picture messages. The ability of children to decode this information correctly depends on how they can understand the true meaning of the information. We have studied two generations of young people – Millennials (Born 1981–1996) and Post-Millennials (Born 1997 – Present). They are experiencing technological advances in the digital world like no generations before but at the same time, they show differences in how much time they spend in digital space and their preference for using social networks. For example, Post-Millennials – unlike Millennials – prefer internet access through their mobile phones rather than a PC/laptop, further Instagram over Facebook, suggesting that they are more likely to view images and videos than textual information. We explain this new preference to share photographs and videos from mobile devices, which places it among new visual galleries the content of which is perceived mainly through pictorial messages. The ability of children to decode this information correctly depends on how they can understand the true meaning of the information. Although the concept of visual literacy is broader, in my presentation I will address the strategies and techniques of teaching the reception and perception of visual information of children of younger school age.

Keywords: *Visual literacy, post-millennials, social networks, primary education.*

1. Introduction

The dominance of images and the messages they carry has never been as obvious as it is now, in the 21st century. An image, in various forms, still more and more penetrates every single sphere of life of each human being and becomes its inseparable and inevitable part. Photographs, films, television, as they had dominated the previous century, achieved a new platform of visuality. The rise of the Internet and social networks opened a new dimension of media and multimedia images. YouTube, Facebook, WhatsApp, Pinterest, Snapchat, Instagram and other channels of social networks produce thousands of videos and information in the form of images every hour. For illustration: YouTube has about 2 billion users, Facebook has 2.3 billion users, Instagram a billion users (Chaffey, D., 2019). Young generation, including children of younger school age, lives in the digital era and takes all new communication inventions for granted. Social networks thus affect the lives of children and young people and through interaction with other peers they influence their perception, opinions and attitudes to values. According to statistics, young people have significant representation on the social media: there are more than 110 million users at the age of 13 – 17 years on Facebook and almost 53 million on Instagram (Kemp, S., 2019). Considering that most of the information has pictorial or multimedia character, new skills come to the fore.

2. Literature review

The term of visual literacy appears in scientific and technical literature approximately from the half of the 20th century. Within the course of the period, the visual literacy is defined in both narrow and broad sense; however, its definition often changes. R. Pettersson says that "visual literacy is the learnt capacity to exactly interpret visual messages and to create such messages. The interpretation and capacity to create could be characterised similarly as reading and writing of hard copy texts" (Pettersson, 1993, p. 62). "The visual literacy relates to a great portion of attained abilities, like the ability to understand (read) and use (write) pictures, as well as think and learn" (Avgerinou, 2001a, p. 26). It is unambiguously implied by the study of foreign expert literature J. Clark-Baca (1990), J. A. Hortin (1994, pp. 5-29), etc. that there was hitherto no agreement about the unified definition of the term of visual literacy that would

be accepted by the majority of renowned theoreticians – researchers. In general, there is just the agreement about the main aspects expressing it: visual perception, visual thinking, visual language, visual communication and the attainment of new visual abilities by learning. We agree with R. A. Bradenom (1996, pp. 9-83), J. A. Hortinom, J. Clark-Bacom and others in their opinion that it is necessary to accept visual thinking, visual perception, visual communication and the attainment of visual abilities by learning as the fundamental concepts of visual literacy.

All we can see around us is an image. Thanks to our vision we can perceive up to 90 percent of information about the world. Surveys prove that the non-text (pictorial) information is read 90-thousand times faster than the text one. When looking at a certain object, we can see it at first and on the basis of this we can describe it. When we are able to describe it, then we can analyse it and subsequently interpret it. In the final stage, we can create meanings on the basis of this perception.

Visual literacy is not a skill in the common sense of the word that would be used by a human as a tool. It is the form of critical thinking increasing our intellectual capacity and allowing us to:

- Interpret the contents of the images
- Investigate the social impact of the images
- Possess the ability of internal visualisation
- Discuss about their meanings with a target group (to characterise who they are meant for)
- Visually communicate
- Read and interpret images

3. Methodology

In this contribution we focus on visual literacy of primary school children, because it is an important part of functional literacy of an individual and at the same time, it is one of the basic prerequisites of competences for the digital century. Our research focuses on identification of the preferences and usage of social networks by primary school children, the generation of Post-Millennials (Born 1997-Present), in all regions of Slovakia. To achieve our objective, we use a combination of research tools: our research is of qualitative-quantitative character. We implement it in the form of electronic questionnaires – web questionnaire, created in the Google form. When comparing two generations of pupils - Millennials (Born 1981-1996) and Post-Millennials (Born 1997-Present), we also use our older research implemented from 2013 to 2014. Altogether, in both stages, the target groups consisted of 588 children. The collected data are processed in a quantitative way, numerically, in percentages and graphically. Real personal identification of a child with each media is used in the qualitative research, more specifically in personal interviews with 56 pupils (8 pupils from each Slovak region). Their answers are interpreted by the quantitative method. As a complementary method we use desk research, in order to analyse the data from other Slovak and foreign researches. This data is used for comparative purposes of our collected data.

4. Findings

We have studied two generations of young people – Millennials (Born 1981-1996) and Post-Millennials (Born 1997-Present). They are experiencing technological advances in the digital world like no generations before but at the same time, they show differences in how much time they spend in digital space and their preferences for using social networks. For example, Post-Millennials – unlike Millennials – prefer internet access through their mobile phones rather than a PC/laptop, further Instagram over Facebook, suggesting that they are more likely to view images and videos than textual information. We explain this new preference to share photographs and videos from mobile devices, which places it among new visual galleries the content of which is perceived mainly through pictorial messages (figure 1, 2).

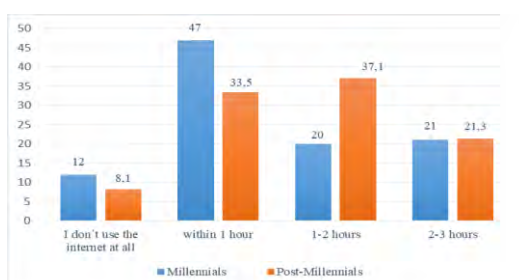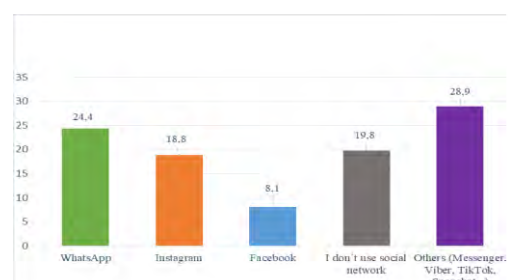*Figure 1. Daily internet use: the pupils in the primary school.*

Figure 2. The popularity of social networks Post-Millennials.

5. Discussion

5.1. What makes social networks so attractive to young people

The ability of children to decode visual information correctly depends on how they can understand the true meaning of the information. Although the concept of visual literacy is broader, in my presentation I will address the strategies and techniques of teaching the reception and perception of visual information of children of younger school age.

Our research shows that in general, social networks are very attractive to primary school pupils, especially by enabling them to communicate fast and comfortably, to share not only texts, but also photographs and videos. It is appreciated especially by the Post-Millennials, who prefer social networks. Other examples of frequently searched and shared items are short, funny videos and photographs. What information they deliver to children? On this question, the young respondents most often responded briefly: they are funny and they have a good fun watching them. Unfortunately, only about 20% of the respondents seek deeper meaning in images. There is a strong dominance of superficial perception of pictorial information, without any deeper context, contemplation or critical thinking.

We can state that today we can no longer neglect the visual literacy – the ability to see "behind the image" and to seek what is not obvious to the common human perception. The possible benefit and impact of reflective view is the development of the ability to meaningfully analyse and interpret images. Learning visual literacy at primary education is justified, because children are since early age confronted with the demand to understand information in visual form. They must perceive this information critically, think about them, because they represent the current society and we need to teach our children since this early age to look at the world more sensitively and to be more perceptive (Gangwey, 2011). "Teaching pupils to understand and critically evaluate constructs is the substantial task of future and current teachers, pedagogues, educators" (Aguirre, In McMaster, 2015).

5.2. How to perceive pictorial information in context

Our research clearly shows that primary school pupils already have sufficient skills to operate digital media, but they are not always, or, better said, almost never, able to interpret the images, visual texts, schemes and graphs and to communicate their comprehension. We can call it insufficient ability to "read" with comprehension. We provide one of possible examples in the school environment of how to perceive pictorial information in context (figure 3a,b).

Figure 3a,b. Perception of pictorial information in context.
Cyclist Peter Sagan is one of the most popular sportsmen in Slovakia and he is also very popular around the world – the three-time world champion, the winner of several stages of the Tour de France. Pupils know him very well from media, cycling is after all one of their favourite free-time activities. But can they read more from the pictures than just whether he is winning or losing?

We have chosen two typical pictures of cycling that illustrate victories and falls, effort and toil, successes and failures. What can pupils read from the photographs?

One of several options – the method of asking questions – helps pupils to better delve into the situation depicted in the photograph and to "read" the image with comprehension:

- *Describe in your own words what do you see.*
- *What emotions do you associate with this picture?*
- *Can you tell what the point of its author was?*
- *Who and what is in the picture? (What is the picture about?)*
- *What symbols are used in this picture? (Symbols)*
- *What do they represent?*
- *Which geometric shapes can you identify in the picture? Do they repeat? (Shapes)*
- *Do they manifest order or chaos?*
- *etc.*

Gradual (critical) uncovering and comprehension of stories and visualised messages finally leads to understanding of facts contained in visuals and visual data. Pupils learn to understand the visual presentation of knowledge, to draw conclusions and to inform others on their findings and knowledge.

6. Conclusion and implications

According to the higher mentioned information and considering the mental and intellectual capacity of primary school pupils, we think it is important to implement new strategies into the educational process that will support the development of visual literacy, i.e. the ability to see and understand the basic elements of visual design, visual language, techniques and media, to understand the representative, explaining, abstract and symbolic images. It is also important to realise the affective, psychological and cognitive impacts in the process of perceiving the visuals, and also the ability to create and to communicate.

Our research findings prove that today, children of younger school age have much better access to any images and other visual materials or texts with informative value. Using this potential for analysis and interpretation of images is one of the most stimulating challenges the current and future teachers will have to face. Thus it is important to equip young perceivers with competences that will enable them to:
- Process information from visuals that are not easy to find
- Prove detailed understanding of an image
- To decide which information is important and which is not. Such perceivers are able to critically evaluate, formulate hypotheses based on specific knowledge and to respond to unexpected situations.
- A higher competence is an analysis of an image, i.e. the perceiver should not only identify the content of the visual, but he/she should be able to uncover such qualities of the image that create the meaning, i.e. to realise the means of expression that create the given content.
- The highest form of visual competence is interpretation of a visual and its evaluation. In this phase, the perceiver should be able to assess the visual as a whole.
- Visual literacy is a complex set of skills through which it is possible to develop the ability of a person to learn.

For children of younger school age to work effectively in today's society, it is not enough to emphasize just the effective reading texts with comprehension, to focus on written words. In the 21st century, the ability to understand digital, visual and acoustic media is similarly important as the ability to read and write. The visual literacy is just as desired as text literacy (Bleed, 2005, pg. 3). Visually literate young people are perceptive and able to navigate not only on the "visually rich web, social networks saturated with photographs, videos,..." (Metros, 2008, pg. 102), but also their "verbal competences, self-expression and arrangement of ideas, motivation and commitment in other educational areas" (Flynt & Brozo, 2010) improve. Research findings prove that acquired visual literacy has many other benefits:
- Visual information is easier to remember
- Visual information is "transferred" faster
- It helps pupils to communicate with the outside world
- It enriches the comprehension
- It increases pleasure, joy
- It increases the number of educated image readers
- It supports pupils from minorities.

Visual literacy is thus a versatile phenomenon and does not designate just a set of mechanically learnt skills to identify the function of an icon in computer or to understand the map of the underground just through sketches and pictograms. Visually literate people are able not only to create relevancies from everything they see, but they also find meaning in everything they perceive. They use reading and writing beyond the elementary literacy, i.e. they control the process of transmitting and receiving messages through images (Šupšáková, 2016). The art of seeing and understanding the visual details, the ability to read and write visual texts and also to understand the meaning of texts and images (Goularte, 2010) is captured by the term visual literacy.

It is essential to implement visual literacy into primary education, because it develops not only the visual information on encyclopaedic level, but also deeper, immanent values based on meanings, relationships, analyses, experiences. Instead of on "good eye", education should focus on "curious eye" that catches things not yet understood and articulated. It is obvious that through the development of "reading" images as subvention to the development of functional literacy in the context of primary education we constitute strong basis for the development of critical thinking that will later be useful for children of younger school age in real life. Thus the task of the school is to lead pupils to be able to resist the spiritual manipulation not by passive reception of images, but by taking an "educated and intentional stand of indifference towards everything that does not deserve their attention" (In Šupšáková, 2004, pg. 76).

References

Avgerinou, M. D. (2001a). *Towards A visual literacy index*. In R.E. Griffin, V. S. Williams, L. Jung (Ed.). Exploring the visual future: Art design, science & technology, Loretto, PA: IVLA.

Avgerinou, M. D. (2009). Re-viewing visual literacy in the „bain d'image" era. *TechTrends, 53*(2), 28-34.

Avgerinou, M., D., Pettersson, R. (2011). Toward a Cohesive Theory of Visual Literacy. *Journal of Visual Literacy, 30*(2), 1-19. Retrieved from: https://doi.org/10.1080/23796529.2011.11674687

Baker, F. W. (2012). *Media Literacy in the K-12 Classroom, 2nd Edition*. USA: International Society for Technology in Education.

Bleed, R. (2005). *Visual Literacy in Higher Education*. ELI Explorations, p. 3. Retrieved from: https://wcpss.pbworks.com/f/Visual+Literacy+in+HE.pdf

Braden, R. A. (1996). Visual literacy. *Journal of Visual Literacy, 16*(2), 9-83.

Chaffey, D. (2019). *Global social media research summary 2019*. Retrieved from: https://smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-media-research

Clark-Baca, J. (1990). *Identification by Consensus of the Critical Constructs of Visual Literacy: A Delphi Study* (Doctoral dissertation, East Texas State University).

Flynt, E. S. & Brozo, W. (2010). Visual literacy and the content classroom: A question of now, not when. The Reading Teacher, 63(6), 526-528. doi: 10.1598/RT.63.6.11. Retrieved from: https://www.researchgate.net/publication/238445937_Visual_Literacy_and_the_Content_Classroom_A_Question_of_Now_Not_When

Gangwey, T. (2011). *Important Quotes about Visual Literacy, Visual Thinking, & Visual Teaching.* In The Visual Teaching Network. Retrieved from: https://www.goodreads.com/work/quotes/828606

Goularte, R. (2010). *The Art of Language: Visual Literacy and Descriptive Writing.* Thermalito: Union School District, 2010. Retrieved from: http://www.share2learn.com/cabe2010workshop.pdf

Hortin, J. A. (1994). *Theoretical Foundations of Visual Literacy.* In D. M. Moore, F.M. Dwyer (Ed.). Visual Literacy: A Spectrum of Visual Learning. Englewood Cliffs, NJ: Educational Technology Publications, 5-29.

Kemp, S. (2019). DIGITAL 2019: Q3 GLOBAL DIGITAL STATSHOT. Retrieved from: https://datareportal.com/reports/digital-2019-q3-global-digital-statshot

Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development.* Nee Jersev: Englewood Cliffs, Prentice-Hall, Inc.

McMaster, S. (2015). Visual Literacy and Art Education: Review of the Literature. Montreal: Concordia University. doi:10.13140/RG.2.1.4331.2482. Retrieved from: https://www.researchgate.net/publication/280319601_Visual_Literacy_and_Art_Education_Review_of_the_Literature

Metros, S. E. (2008). The Educator's Role in Preparing Visually Literate Learners. *Theory into Practice, the College of Education and Human Ecology, 47, Issue 2*. Retrieved from: https://www.tandfonline.com/author/Metros%2C+Susan+E

Mirzoeff, N. (1999). *An introduction to Visual culture*. London: Routledge.

Pettersson, R. (1993). *Visual information.* Englewood Cliffs, NJ: Educational Technology Publications.

Pettersson, R. (2019). *ID Theories.* Sweden, Tullinge, Sweden: Institute for Infology.

Stafford, B. M. (1999). *Visual Analogy, Consciousness as the Art of Connecting*. Cambridge, London: The MIT Press.

Šupšáková, B. (2016). Media education of children and youth as a path to media literacy. *Communication today, 7*(1), 32-51.

Šupšáková, B. (2016). Visual literacy for the 21st century. *International e-Journal of Advances in Education, 2*(5), 202-208. Retrieved from: http://ijaedu.ocerintjournals.org/article/view/5000199612

Šupšáková, B. (2020). Dimensions of Visual Literacy. Lubljana: DEBORA.

Šupšakova, B. a kol. (2004). *Vizuálna kultúra a umenie v škole: nové myšlienky a prístupy*. Bratislava: Digit.

Survey on the social network usage of children and teenagers in Germany 2019. Retrieved from: https://www.statista.com/statistics/422297/children-and-teenagers-social-network-usage-germany