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Tibor Koltay

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Tibor Koltay
Szent István University, Jászberény, Hungary

Abstract
With the advent of digital technologies, awareness of media is acquiring crucial importance. Media literacy, information literacy and digital literacy are the three most prevailing concepts that focus on a critical approach towards media messages. This article gives an overview of the nature of these literacies, which show both similarities to and differences from each other. The various contexts of their functioning are outlined and additional literacies are mentioned. Especial attention is given to the question of the blurring line between media consumers and producers.

Keywords
digital literacy, information literacy, literacies, media literacy, media production

Introduction

In the present-day society we witness the emergence of post-typographic forms of text production, distribution, and reception that use digital electronic media (Lankshear and Knobel, 2004). Information is available in unimaginably large amounts and variety. In addition to quantity, it is available through multiple media and is of uncertain quality. The only way to deal with these issues is to employ more digital tools.

The virtual world that produces this information does not sit 'out there', but invades the 'real' world. What is digital, nonetheless, is subject to human agency and to human understanding. Technology is just a tool, which does not determine how we must act. Among these circumstances we have to acquire an understanding and adopt meaningful courses of action by employing different literacies (ALA, 2000; Martin and Madigan, 2006).

There is a high rate of media consumption and society is saturated by media. The media deeply influences perceptions, beliefs and attitudes. The importance of visual communication and information is increasing. The effective use of information in society and the need for lifelong learning acquire more and more importance (Jolls and Thoman,

Corresponding author:
Tibor Koltay, Szent István University, Jászberény, Hungary
Email: koltay.tibor@abk.szie.hu

2008). Media consumption is changing through user generated communication and the availability of digital products (European Commission, 2007).

It is consequently not an accident that there is a growing academic interest in questions of literacy, with emphasis on exploring them under the circumstances of the electronic (digital) era, displaying a multidisciplinary mix of specialists in literacy, culture, media education, human-computer interaction, and social studies of technology (Livingstone, 2004).

The study of media literacy is highly interdisciplinary, using the tools and methods of sociology, psychology, political theory, gender and race studies, as well as cultural studies, art, and aesthetics. The work of Marshall McLuhan and others in communication studies is also important here (Duncan, 2006). This is not much different in the case of literacy. The issues of how people comprehend, interpret, critically analyse and compose texts become research subjects in the fields of literary theory, cultural studies, history, psychology, library and information science, medicine and public health, linguistics, rhetoric, communication and media studies (Hobbs, 2006b).

Importance and definitions

The importance of media literacy is justified not only by the quantity of media exposure. The vital role of information in the development of democracy, cultural participation and active citizenship also justifies it. We have to acknowledge that children and youth, where entertainment and popular culture messages serve as an agent of socialization, are exposed to large quantities of media messages. Adolescents spend more and more time consuming entertainment media, including television, the internet, popular music, movies, and videogames. Using, manipulating and creating information is acquiring growing importance especially for knowledge workers, who increasingly rely on the internet and computing tools (Hobbs, 2007).

Taking into consideration the above situation and other factors, the European Commission (2007) adopted a view of media literacy that is based on the fact that there is a need to build up better understanding of how the media work in the digital world and that citizens need to understand better the economic and cultural dimension of media.

Like the other three subjects of our discussion, media literacy is an umbrella concept. It is characterized by a diversity of perspectives and a multitude of definitions. This can be seen as both a strength and a weakness for it: the field is open to new possibilities and innovation, while there are various and sometimes dissimilar notions about its nature (Mendoza, 2007).

So, what is media literacy? One of its perhaps best known definitions, conceived by Aufderheide (1992), identifies it as a movement, which is designed to help to understand, to produce and negotiate meanings in a culture of images, words and sounds. She goes on by stating as follows:

> A media literate person – and everyone should have the opportunity to become one – can decode, evaluate, analyse and produce both print and electronic media. The fundamental objective of media literacy is a critical autonomy relationship to all media. Emphases in media literacy training range widely, including informed citizenship, aesthetic appreciation and expression, social advocacy, self-esteem, and consumer competence. (Aufderheide, 1992)

She adds to the above five qualities of media:

- Media are constructed and construct reality;
- Media have commercial implications;
- Media have ideological and political implications;
- Form and content are related in each medium, each of which has a unique aesthetic, codes and conventions;
- Receivers negotiate meaning in media. (Aufderheide, 1992)

The definition adopted by the European Commission also stresses the critical aspect, putting it in a more straightforward way. Besides that, it acknowledges both reception and production of media.

Media literacy is generally defined as the ability to access the media, to understand and to critically evaluate different aspects of the media and media content and to create communications in a variety of contexts (European Commission, 2007).

In accordance with this definition, the various levels of media literacy include:

- feeling comfortable with all existing media from newspapers to virtual communities; actively using media through, *inter alia*, interactive television, use of internet search engines or participation in virtual communities, and better exploiting the potential of media for entertainment, access to culture, intercultural dialogue, learning and daily-life applications (for instance, through libraries, podcasts);
- having a critical approach to media as regards both quality and accuracy of content (for example, being able to assess information, dealing with advertising on various media, using search engines intelligently);
- using media creatively, as the evolution of media technologies and the increasing presence of the internet as a distribution channel allow an ever growing number of Europeans to create and disseminate images, information and content;
- understanding the media economy and the difference between pluralism and media ownership;
- being aware of copyright issues which are essential for a 'culture of legality', especially for the younger generation in its double capacity of consumers and producers of content. (European Commission, 2007)

It is worth inspecting a Canadian approach, as well. The definition by the Ontario Association for Media Literacy (AML), cited by Duncan (2006), puts emphasis on the educational aspect:

> Media literacy is concerned with developing an informed and critical understanding of the nature of the mass media, the techniques used by them, and the impact of these techniques. It is education that aims to increase students' understanding and enjoyment of how the media work, how they produce meaning, how they are organized, and how they construct reality. Media literacy also aims to provide students with the ability to create media products. (Duncan, 2006)

Gutiérrez Martín and Hottmann (2006) also add that – on a more specific level – media literacy has to do with education, the primary objective of which is the following:

> To increase students' understanding and enjoyment of media, facilitate understanding of how the media produce meaning, how they are organized, and how they construct their own reality – all this while keeping in mind the skills and knowledge necessary to create media products. (Gutiérrez Martín and Hottmann, 2006)

Media literacy seems to cover 'panmedia', as it includes the interpretation of all types of complex, mediated symbolic texts made available by 'traditional' or electronic (digital) means. One of the reasons for this is that there is an integrated media environment, which encompasses print, audiovisual and computer media, as well as telephony. The origin of this integration lies in the fact that computers are not replacing television, just as television did not replace print (Livingstone, 2004).

As a term, media literacy has mostly been applied only to K-12 education. In regard to this generation, it is not limited to formal classroom instruction. It can become part of after-school activities, summer camps, community organizations, and faith-based groups. Based on the idea that home is where children spend most of their time using media, some proponents of media literacy have focused on helping parents develop their children's media literacy skills through active mediation (*Key Facts*, 2003). Despite some controversies, however, media literacy is also applicable to higher education (Mihailidis and Hiebert, 2005).

It would be beyond the scope of this article to answer the questions put by Hobbs (1998). The series of questions, called the 'seven great debates in the media literacy movement', are nonetheless very much worth enumerating as follows:

1) Should media literacy education aim to protect children and young people from negative media influences?
2) Should media production be an essential feature of media literacy education?
3) Should media literacy focus on popular culture texts?
4) Should media literacy have a more explicit political and/or ideological agenda?
5) Should media literacy be focused on school-based K-12 educational environments?
6) Should media literacy be taught as a specialist subject or integrated within the context of existing subjects?
7) Should media literacy initiatives be supported financially by media organizations?

Literacy and literacies

The concept of literacy includes visual, electronic, and digital forms of expression and communication. Modern literacy has broadened in scope, as it is tied to technology and culture, and the ability to become and remain literate requires a long term commitment (Cordes, 2009).

According to the widely accepted definition by Street (1984), literacy is conceived as 'social practices and conceptions of reading and writing'. Social practices gain emphasis here and that is the reason why the history of literacy shows a number of contestations over the power and authority to access, interpret and produce printed texts, which have been magnified by the growing role of digital technologies (Livingstone, 2004).

There are many literacies that can be identified within varying social contexts and under varying social conditions and the nature of which is changing within the conditions of textual work (Lankshear and Knobel, 2004).

Media literacy, information literacy, digital literacy

In his comprehensive review, Bawden (2001) identified various terms related to information literacy that have been used in the literature:

- information literacy;
- computer literacy: synonyms – IT/information technology/electronic/electronic information literacy;
- library literacy;
- media literacy;
- network literacy: synonyms – internet literacy, hyper-literacy;
- digital literacy: synonym – digital information literacy.

Besides media literacy, there are two literacies that are strongly present in the professional literature, related to these issues: information literacy and digital literacy.

Before engaging in a review of the similarities and differences among these three literacies, we have to mention the issue of v*isual literacy.* Though it seems to compete with media literacy, it is rather complementary to it. It is defined as follows:

> Visual Literacy refers to a group of vision-competencies a human being can develop by seeing and at the same time having and integrating other sensory experiences. The development of these competencies is fundamental to normal human learning. When developed, they enable a visually literate person to discriminate and interpret the visible actions, objects, symbols, natural or man-made, that he encounters in his environment. Through the creative use of these competencies, he is able to communicate with others. Through the appreciative use of these competencies, he is able to comprehend and enjoy the masterworks of visual communication. (IVLA, 2009)

If we speak about the three literacies, it seems to be obvious that they have to be defined. We have done this already in the case of media literacy. Speaking about definitions, we should not conceal that there is reason in the argument of Ward (2006), who states that definitional issues have plagued the concept of information literacy, including media literacy, and distinctions between terms seem to be a matter of semantics.

Be that as it may, the presumably best known definition of information literacy says that information literate people are able to recognize when information is needed. They are also able to identify, locate, evaluate, and use information to solve a particular problem (ALA, 1989).

The nature of information literacy can be summarized by the following. It emphasizes the need for careful retrieval and selection of information available in the workplace, at school, and in all aspects of personal decision-making, especially in the areas of citizenship and health. Information literacy education emphasizes critical thinking, meta-cognitive, and procedural knowledge used to locate information in specific domains, fields, and contexts. A prime emphasis is placed on recognizing message quality, authenticity and credibility (Hobbs, 2006b).

The concept of digital literacy, in its present understanding, was introduced by Paul Gilster (1997). He was not the first to use the phrase ‘digital literacy’. It had been applied in the 1990s to denote the ability to read and comprehend hypertext (Bawden, 2001).

Gilster explained digital literacy as an ability to understand and to use information from a variety of digital sources without concern for the different 'competence lists', often criticized for being restrictive.

The four core competencies of digital literacy are:

- internet searching,
- hypertext navigation,
- knowledge assembly,
- content evaluation. (Bawden, 2008)

Following the thoughts of Bawden (2001), we can break down these competencies to the following qualities:

- Searching for information (information retrieval) is coupled with critical thinking. A quality that characterizes most approaches towards information literacy.
- Besides accessing information, there is publishing and communicating it. This quality is not always present in information literacy theory and practice. It could become an integral part of it, as we will suggest later.
- There is an awareness of the value of traditional tools in conjunction with networked media and social networks.
- Knowledge assembly is the ability to collect reliable information from diverse sources.

Martin's definition of digital literacy emphasizes both its wide meaning and the role of media:

> Digital Literacy is the awareness, attitude and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyse and synthesize digital resources, construct new knowledge, create media expressions, and communicate with others, in the context of specific life situations, in order to enable constructive social action; and to reflect upon this process. (Martin, 2006: 19)

The term 'digital literacy' is often used in a restricted meaning, denoting exclusively the effective use of information and communications technology (ICT). There are also inconsistencies in the use of the term. A distinctive feature of digital literacy is expressed by Bawden (2008):

> Digital literacy touches on and includes many things that it does not claim to own. It encompasses the presentation of information, without subsuming creative writing and visualization. It encompasses the evaluation of information, without claiming systematic reviewing and meta-analysis as its own. It includes organization of information but lays no claim to the construction and operation of terminologies, taxonomies and thesauri. (2008: 26)

Parallels in similarities and differences

It seems to be reasonable to limit the comparison to media literacy and information literacy. Digital literacy is composed of different literacies, thus there is no need to search

for similarities and differences with other types of literacy. This is true even if we understand that none of the literacies lacks complexity.

Among the characteristics of media literacy, analytic competencies receive an emphasis. Our analytic repertoire, which includes genre knowledge and literary merit, is heavily dependent on its historical origins in print, thus poorly applicable to new media (Livingstone, 2004). This shows both similarities and differences with information literacy, which also requires analytic skills, which seem to be based, however, more on traditional conceptions.

Media literacy and information literacy are coupled also by the requirement of critical evaluation, regarded in both cases as a kind of default quality. In the case of media literacy this can be an examination of the constructedness of media messages (Hobbs, 2006a).

Information literacy can be interpreted as a way of functioning within complex communicative situations (Geisler et al., 2001). It seems to be hardly disputable that this is also valid for media literacy.

Johnston and Webber (2006) propose information literacy as a soft applied discipline. There seems to be no similar attempt in the field of media literacy.

Information literacy often encompasses a wide spectrum of issues and is on the whole an important issue. Notwithstanding, this concept and especially the *lack of information literacy* has always seemed to be of more importance to information specialists, in particular to academic librarians, than to any other players in the information and education arena (Bawden and Robinson, 2009). Media literacy seems to be limited in a different way. Whether media literacy will be an issue limited to a movement of media education within the framework of primary and secondary education remains to be seen.

As stated above, the European Commission (2007) has adopted the idea of media literacy. In particular, their document directs our attention towards the importance of media literacy for commercial communication. Specifically, advertising is part of everyday life, thus it is important to raise awareness among all audiences about the role of commercial communication, among other roles giving young audiences tools to develop a critical approach to commercial communication. Needless to say, this aspect is one of the distinctive characteristics of media literacy that cannot be found in other literacies.

According to Hobbs (2006b), there is empirical evidence that media literacy education can improve traditional print literacy skills. In the case of information literacy the emphasis is more on the close connection to print literacy, as without being able to read continuously and correctly it is impossible to exercise information literacy.

Speaking about information literacy education, Bundy (2004) stresses that it requires technology mediated but not technology focused pedagogy. It is again rather unquestionable if this is true also in the context of media literacy.

How many literacies?

In the introduction we cited the review by Bawden (2001) and presented a list of literacies. With the aim of introducing the concept of multimodal literacy, Cordes (2009) offers a different list. It contains information literacy, media literacy and visual literacy, all presented before. From the list, *multicultural literacy* has to be mentioned as a new concept. It is ‘the ability to acknowledge, compare, contrast, and appreciate commonalities and differences in cultural behaviours beliefs and values, within and between cultures’.

There is also a different type of literacy that is worth a mention. It is called *emerging technology literacy* and is defined as follows:

> Emerging technology literacy, or the ability to ongoingly adapt to, understand, evaluate and make use of the continually emerging innovations in information technology so as not to be a prisoner of prior tools and resources, and to make intelligent decisions about the adoption of new ones. Clearly this includes understanding of the human, organizational and social context of technologies as well as criteria for their evaluation. (Shapiro and Hughes, 1996)

With this, the list of newer literacies does not seem to end. There is reproduction literacy, as well. It means the creative re-use of existing materials and is embedded into digital literacy (Bawden, 2008). This thought is reasonable, as communication increasingly involves 'not the creation of original texts but selecting, arranging, filtering and recombining pre-existing information' – in other words, 'finding or commissioning a good text' (Geisler et al., 2001: 285–286). We have to be aware, nonetheless, that this is not a new phenomenon, even if it has been magnified by digital technologies. As, for example, Knott (2005) explains, many of our writings involve reflection on written texts, because the thinking and research on the given subject has already been done and it has been published.

It is not only Cordes who argues for multimodal literacy. Ferguson (2002) also votes for using the concept of multimodal communication. He goes on to say that a concept of literacy which is based on a kind of deficit model will not work, as literacy is not the main goal of education, but a by-product of the educational process. Multimodal literacy, as explained by Cordes (2009), promises a synthesis of multiple modes of communication that results in a transformation of the singular modes into forms that produce new or multiple meanings.

Consumers and producers

Not all definitions of media literacy include production, as ordinary people are regarded as receivers but not senders of messages. On the other hand, content creation is easier than ever, because the same technology can easily be used to send and receive, thus many are already content producers (Livingstone, 2004).

The situation is somewhat similar in regard to information literacy in the sense that the idea of production appears less frequently than reception, which is usually approached as finding appropriate information. Nevertheless, it is recognized that the web began to develop as a global forum for conversations and we witness an explosive growth in online publishing, with an increasing number of writers (Beeson, 2005). In this environment writers have to realize that they are reaching a much wider and more varied audience, which comprises specialists and laymen (Chan and Foo, 2004).

Greater Expectations, a document produced by the Association of American Colleges and Universities, envisions 'empowered' and informed learners who are able to:

- Transform information into knowledge and knowledge into judgment and action.
- Effectively communicate orally, visually, in writing, and in a second language. (AACU, 2002)

Lynch (1998) expresses the view that information literacy includes text authoring in a full range of genres including visual and multimedia communication as follows:

> The body of knowledge related to text – authoring and critical and analytic reading (including the assessment of purpose, bias, accuracy and quality) – needs to be extended to the full range of visual (image and video) and multimedia communication genres. This includes an appreciation of interactive media, and also a recognition of the fluid nature of many digital forms, plus an understanding of the computer's growing ability to edit or even fabricate what have traditionally been viewed as factual records of events (such as images). (Lynch, 2008)

Information literacy, on the whole, is tied to verbal communication (Koltay, 2007). This is a kind of reverse argument to the thoughts of Attfield et al. (2003), who argue that information seeking, a fundamental part of information literacy, can be put into the context of writing, as writing is among the most common tasks within which information seeking is embedded.

Shapiro and Hughes (1996) speak about seven dimensions of literacy. One of these is publishing literacy that encompasses the ability to format and publish research and ideas electronically, in textual and multimedia forms. They put information literacy in a broad context by stating that information is a component of knowledge, the human mind and human communication. That is the reason why they compare it to the trivium of basic liberal arts (grammar, logic and rhetoric), which was foundational to higher education in medieval society and is fundamental to our humanness.

Conclusion

There is no single literacy that is appropriate for all people or for one person over all their lifetime and that would not require a constant updating of concepts and competences in accordance with the changing circumstances of the information environment (Bawden, 2008).

Media literacy is important for all citizens who intentionally, or without knowing it, consume media, the presence of which has become wider and more diverse with the new digital technologies and the growing participation of laypersons. Media literacy thus has to find its role both in primary, secondary and higher education either on its own, or presumably – with more likelihood – as part of some kind of multiple or multimodal literacy.

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