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# Unpacking New Media Literacy

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## ABSTRACT

The 21<sup>st</sup> century has marked an unprecedented advancement of new media. New media has become so pervasive that it has penetrated into every aspect of our society. New media literacy plays an essential role for any citizen to participate fully in the 21<sup>st</sup> century society. Researchers have documented that literacy has evolved historically from classic literacy (reading-writing-understanding) to audiovisual literacy to digital literacy or information literacy and recently to new media literacy. A review of literature on media literacy reveals that there is a lack of thorough analysis of unique characteristics of new media and its impacts upon the notion of new media literacy. The purpose of the study is to unpack new media literacy and propose a framework for a systematic investigation of new media literacy.

**Keywords:** new media, computer literacy and new media literacy.

## 1. INTRODUCTION

The 21<sup>st</sup> century has marked an unprecedented advancement of new media. New media has become so pervasive that it has penetrated into every aspect of our society. New media literacy plays an essential role for any citizen to participate fully in the 21<sup>st</sup> century society. Researchers have documented that literacy has evolved historically in stages: (1) classic literacy (reading-writing-understanding); (2) audiovisual literacy (mostly related to electronic media); (3) digital literacy; (4) information literacy (mostly related to computer and digital media); and recently (5) new media literacy (mostly related to internet and the phenomenon of media convergence) [34].

However, a review of the literature on new media literacy reveals that many researchers could not escape from traditional views of media literacy and missed the core elements in the notion of new media literacy. More often than not, new media literacy is primarily conceived as a combination of information skills, conventional computer literacy skills, and communication skills (or multiple literacies). There is an oversight on the unique characteristics of new media and how these characteristics impact on the notion of media literacy in the new media era of 21<sup>st</sup> century. The purpose of this study is to unpack new media literacy focusing on its technical and socio-cultural dimensions and provide a new framework to systematically investigate the notion of new media literacy.

## 2. CHARACTERISTICS OF NEW MEDIA

McLuhan’s famous remark that *media is the message* has profoundly impacted our understanding of the role of media in our society. According to McLuhan [20], media is an extension of ourselves. The choice of media either amplifies or limits the content it conveys. *Media is the message* has never been more true in this new media age. New media technology has offered unprecedented affordance for human communication, which impacts more significantly on the forms of the message and modes of communication. Based on our analysis of the literature, we propose that new media can be broadly understood by their technical and socio-cultural characteristics.

### Technical Characteristics

Earlier attempts to define new media primarily focused on their technical affordances. For example, Rice [29] defined new media as computer and communication technologies, which allow users to interact with information and with each other. Pratt [26] compared new media with conventional broadcasting and recording technologies and stated that new media is characteristic of its multimedia affordance. Manovich [19] identified *numerical representation* and *modularity* as two underlying principles of new media. New media are, first of all, in the form of digital codes. Numerical representation of media makes it programmable and computable. Media modularity refers to the fact that the stand-alone modules in new media can be assembled into larger-scale objects, for example, the background sound and picture images in Windows Movie Maker. Modularity enables the elements to retain their own identity and meanwhile, these modules can be altered to achieve different effects. The two underlying principles of numerical representation and modularity give rise to another two features of new media – *automation* of operation and *variability* in media production and manipulation on different levels. Tagging function in Web 2.0 embodies these two features. Users could choose the recommended tags or create their own tags of video clips in YouTube, or URLs in Delicious bookmark organizer. The automation function of tagging enables users to search for related web-pages while the variability function enables users to easily edit and sort the tagging of their files.

The technical features of new media facilitate the development of new media languages. For example, Twitter enables users to spontaneously update their status even from their mobile devices. It provides a platform for a new type of language to grow. This new language can be short, informal, inviting, and intriguing. New media typifies various forms: genres, rules [27],

codes and conventions [2], and symbol systems of communication [2]. In addition, new media is characterized by modularity [19], multimodality [1], hybridity [22] and interactivity [1] of different media and platforms. For example, the BBC website is a platform featuring co-existence of videos, audio clips/podcasts, texts, and graphs (hybridity). A piece of news is now presented as a short written report accompanied with an interview video clip (multimodality). Users can access the news report on their mobile devices (interactivity of platforms). Flexibility and fluency across platforms is highly increased [24].

### Socio-cultural Characteristics

Recent literature on new media has shifted the focus to its socio-cultural aspects. Lievrouw & Livingstone [16], for example, pointed out that the definition of new media should not be limited to its technical characteristics. The definition of new media should be expanded to include its socio-cultural characteristics. Along the similar line, Jenkins [11] studied the impact of new media on consumers. He concluded that new media is not merely a technical tool that peripherally influences our culture. New media plays an active role in creating a new culture and embeds itself as an integral part of it. Jenkins [11] termed the emerging culture as convergence culture or participatory culture.

The socio-cultural aspect of new media falls under three categories: (1) construction of media; (2) ideology and social values embedded in media; and (3) purposes that media serves. Firstly, media is constructed. Media messages do not equate the “reality”. Instead, they represent interpretations of reality by the author of the message [2], [27]. An empowering characteristic of new media lies in the fact that it enables ordinary users to construct and co-construct media content. The media consumers, as Jenkins [11] suggested, are no longer at the end of information flow, merely absorbing information. Instead, they are actively engaged in altering the information flow through participation and collaboration with other media users. Consequently, they promote the rapid development of grassroots energy and “folksonomy” [4], [25], as opposed to taxonomy by experts. This bottom-up energy has generated enormous creativity [4], and harnessed collective intelligence of the general public [8], [23]. Secondly, media has embedded values and ideological implications. Media messages are neither facts nor truths, contrary to what the media business often claims to be. Neither is media neutral. It is constructed with embedded values and ideological implications of creators [6], [27]. New media empowers the once end-users of media by providing a platform for their voices to be “heard” and amplifying their values and ideology, which is often impossible in real life. Thirdly, media serves varying purposes. Media messages serve social, political, commercial [2], [27] and educational [21] purposes. For example, social networking has emerged to serve social purposes particularly for youth. In an ethnographical study on youth’s informal learning with new media [10], it was found that majority of the youth are using online media to expand their social circles. They always stay “connected” with their friends, new and old, through private or public new media spaces. Also, some studies suggested that new media has empowered the users and the online civic engagement [28] has given rise to the emergence of self-actualizing citizenship [3].

With the aggressive advancement of new media, there is a need to re-examine media literacy in the context of 21<sup>st</sup> century – the

new media era. For any citizen to function successfully in the society of the 21<sup>st</sup> century, it is far from adequate for him/her to be equipped with just classic literacy and computer literacy. An expanded notion of new media literacy is necessary. In the following session, we propose a framework to elaborate on the notion of media literacy.

### 3. A FRAMEWORK FOR NEW MEDIA LITERACY

As Universitat Autònoma de Barcelona [34] has suggested, new media literacy is a convergence of all literacy developed over the past centuries including classic literacy, audiovisual literacy, digital literacy, and information literacy. Taking this view as an anchor point, we propose a framework that unpacks new media literacy. This framework also offers a systematic view of new media literacy. Based on our analysis and synthesis, we propose that new media literacy can be understood as two continuums from consuming to prosuming literacy and from functional to critical literacy.

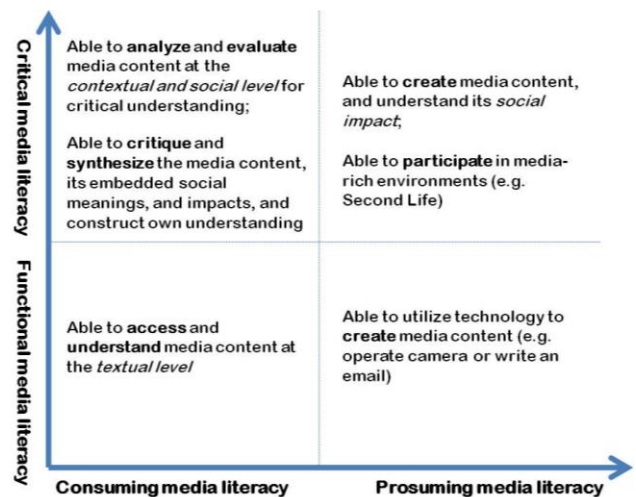


Figure 1. Framework for new media literacy

#### From Consuming to Prosuming Media Literacy

First of all, new media literacy can be viewed as a continuum from media “consuming” to media “prosuming”. “Consuming” media literacy refers to one’s ability to access media message and use media at various proficiency levels. Earlier literature on media literacy put a great emphasis on users’ skills of “consuming” media message. Media literacy was viewed as “the ability to *access, analyze, evaluate, and communicate* message in a variety of forms” [2: 7]. The rapid advancement of information and communication technologies makes the issue of access less prominent. The skill set in “consuming” media has been expanded to accommodate more critical skills in processing information, such as “synthesis” [7] and “critique” [7], [14], [17].

“Prosuming” media literacy refers to one’s ability to produce media content, in addition to consuming skills. “Prosuming” is a notion first put forward by Toffler [33]. A “prosumer” is both a producer and consumer whose “half of production is for exchange and half of production is for self use”[33: 288]. Prosumers can produce customized media products themselves, taking full advantages brought about by new technologies.

Media prosumption has two aspects: creating/producing media

content [9], [17], [31], [32], and participating in media uses [11], [15]. For example, students may use media tools to create a video clip and upload it to YouTube. The production involves the design of media content aligned with individual ideology, cultural background and purposes at hand. The consuming aspect is integrated and implied in the process of production. For example, when other users comment on a particular clip, the creator may have to read and interpret the comments carefully before he/she responds. This process is similar to what Jolls [12] called participation in the use of media.

### **From Functional to Critical Media Literacy**

We discussed the consuming and prosuming aspects of new media literacy. However, media literacy is not just a set of neutral technical skills possessed by an individual. Instead, it is a social and cultural practice situated in a specific context [17], [30]. Recent research [5] has highlighted the importance of the criticality aspect in new media literacy as opposed to its functional aspect.

To expand Buckingham's notion of functional and critical literacy [5], we propose to view functional media literacy as the individual's textual meaning making and use of media tools and content. This involves accessing and literally (textual) understanding of the media message in consuming media, and operating media tools and producing media content. Critical literacy, on the other hand, refers to analyzing, evaluating, and critiquing media [14], [18]. It involves an understanding of both the textual and social meanings of the media content, the social values, purpose of the media producers as well as the power position of the media producers and audience. Functional media literacy is essential because users need to be familiar with technical characteristics of new media tools and the new media language to actively utilize the new media technologies as he/she desires. However, it is inadequate to remain a functional consumer and prosumer. Criticality is crucial in consuming and prosuming new media. A critical consumer and prosumer has a good grasp of social, economic, political and cultural contexts of the media consumption and production and can exercise these critical views to his/her advantage in media consumption and production.

Based on the two continuums from consumer vs. prosumer and from functional vs. critical media literacy, four types of new media literacy can be identified: (1) A functional media consumer; A functional new media consumer is one who can access to media content and understands what is being conveyed. (2) A critical media consumer; A critical media consumer, in comparison, would study the social, economic, political and cultural contexts of the media content. He/she has a good understanding of construction of media message, its embedded social values and ideologies, and the purpose it aims to serve – the socio-cultural characteristics of media. This person develops a critical understanding of media message, and more importantly, possesses a good sense of judgment in media consumption. (3) A functional prosumer; A functional prosumer is one who knows how to create new media content (e.g., writing a blog entry) and participate in various new media spaces. (4) A critical prosumer; A critical prosumer understands his/her position and identity in media construction, media publication and media participation. He is able to intricately intertwine his social values in his media construction and utilize the media message in a productive way.

### **From Computer Literacy to New Media Literacy**

We put forward a framework in viewing new media literacy in the above discussions. A person who is media literate in the 21<sup>st</sup> century should be all of the above – a functional consumer and prosumer as well as a critical consumer and prosumer. New media literacy is a convergence of all these essential components.

Computer literacy is only one aspect of new media literacy. Computer literacy covers the technical characteristics of media. It evolves from computer awareness in 1970s to the writing of computer programs in 1980s, and to set of application skills such as word processing and data management with the availability of user-friendly software [13]. At best, a person who is computer literate is a functional consumer or prosumer.

With the advancement of the Internet, information literacy is added on top of computer literacy. Information literacy requires users to be familiar with the Internet, have a good understanding of information types and formats, and exercise critical analysis and evaluation of online information. In our analysis, a person who is information literate is a critical consumer.

Least emphasized and most overlooked is criticality in media prosumption. We argue that new media, with its features, requires users to become a critical prosumer. It is imperative that users develop critical media competence in consuming and more importantly, prosuming media. New media provides a platform for various voice, values, and ideologies. As some researchers e.g. Jenkins [11] and Lankshear & Knobel [15] suggested, the new media technologies are bringing about a convergence culture featured by the active participation and arising influence of online media users. It calls upon a critical prosumer who is proficient in using technologies and media production. He/she is capable of forming his ideas and opinion based on his/her analysis and evaluation of various sources of media messages. A critical prosumer is actively engaged in media-rich environment and effectively participates in new media space. He/she understands that he/she is constructing his interpretations and there is an ample space for negotiations in co-construction of understanding in a community. A critical prosumer is also capable of intricately embedding his values and thoughts and critically evaluates his language in conveying his beliefs and argument. Such insights are important and viewed as "a prerequisite" for effective participation in the 21<sup>st</sup> century information society.

## **4. SUMMARY**

In this paper, we revisit the notion of media literacy and unpack the technical and socio-cultural characteristics of new media. We propose a framework to view the development of new media literacy along the two continuums from consumption to presumption, and from functionality to criticality. In our view, new media literacy includes four components (1) functional consuming; (2) functional prosuming; (3) critical consuming; and (4) critical prosuming.

Media literacy is a foundation for effective citizenship in the 21<sup>st</sup> century. "The 21<sup>st</sup> century skills of media literacy are the skills that provide citizens with the base of knowledge that they need to be effective participants in the 21<sup>st</sup> century around the world" [35:1]. It is with this understanding that we wrote this paper. It serves our purpose if this paper stimulates more

discussions on new media literacy – an essential skill that no one in the 21<sup>st</sup> century can afford not to have.

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