# Graphic Design Students and Social Media Usage: A Check on New Media Literacy

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## Abstract

Digital media's growing impact on education is a defining feature of the twenty-first century. Research indicates a notable void in knowledge on the degree of active engagement with new media literacy that students in diverse fields, such as graphic design, exhibit. Using the New Media Literacy Framework, this study attempts to address this gap by objectively evaluating the graphic design students' new media literacy abilities. The study adopted a quantitative descriptive survey to identify, analyse, and describe the new media literacy skills of Graphic design students towards social media use. A purposive sampling technique was used to select 150 active students based on the four-continua skills as indicators from the New Media Literacy Framework. The findings of the study indicate that Graphic design students have high levels of functional consuming, critical consuming, critical consuming, and functional media literacy skills. Additionally, regression analysis conducted to establish what influences design students' new media literacy skills revealed the predictors as; the type of social media used by design students, students' level, gender, and the area of specialization of the design student.

Keywords: new media literacy, social media, Graphic design students.

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## 1. Introduction

Today's world is characterized by a strong media presence that functions as a medium for informing, educating, and entertaining the masses. The media's influence on our lives is only going to increase (Sara, Rachel, and Martyn, 2013). Different technologies are being used to make media more accessible, which is reflected in the indicators of this presence. One such medium is social media, which is engaged by many people. Social media is increasingly becoming an important global information space, with over a billion users. It has transformed the way we interact with everything (Sara, Rachel, and Martyn, 2013). Social media often refers to new forms of media that involve interactive participation (Manning, 2014). It is different from traditional media, which does not allow for interactivity. Social media is known for its platform support for broadcasting, messaging, entertainment, and more. With internet connectivity, social media is easily accessible.

Recognizing social media as a form of new media, it is necessary for today's social media users to acquire new media literacy skills (Manning, 2014). Knowing how to use this new technology and critically evaluate its influence and impact is important. This implies that a user is now informed holistically, knowing and understanding the rubrics of social media. The user, again, should possess the ability to access, analyse, evaluate, and produce information for specific outcomes. This is what new media literacy is about (Solomon, 2012).

This paper's regard for design students understands them as creative individuals, active social media users, and content creators on social media platforms. The frame of their studies extensively looks at learning to provide solutions to communication design challenges which includes information presentation is no exception. For example, framing and presenting information appropriately becomes their work, where social media can be a channel for viewership.

In the 21st century era marked by the increasing influence of digital media in education, there exists a significant gap in understanding the extent to which students across various disciplines, including graphic design, actively engage with new media literacy (Solomon, 2012). This study seeks to investigate the level of graphic design students' involvement in applying new media literacy skills. By addressing this research problem, insights into the role of new media literacy in the diverse use of Graphic design contexts and strategies are explored. This adds to building up the knowledge base on student engagement in new media and the acquisition of vital skill sets. It adds up a repertoire of competencies that enables information to be analysed, accessed, and evaluated to produce successful outcomes as expected by graphic designers. Again. it is essential to explore their thoughts on new media literacy to ascertain their understanding of social media usage in their contribution to information.

In the check on new media literacy, the extent to which design students are aware of new media literacy skills, particularly regarding social media use, would be uncovered. A check on media literacy would also describe an awareness regarding our mediated environment or consumption of mass communication. Hence, drawing attention to maintain cognitive, emotional, aesthetic, and moral awareness as we interact with the new

media (Manning, 2014).

#### 2. Literature Review

#### 2.1 Students and New Media Literacy

A large and growing body of literature has investigated new media literacy in policies, perceptions, media dynamics, pedagogies, and societal influence. Most of these studies focused on students (Suminas and Jastramskis, 2020), teachers (Torres and Mecardo, 2013), broadcasters (Todorova, 2015), media influencers, commercials, and entertainers (Eagle, 2007). However, there is less attention to students, especially as subjects in the learning frame—specifically, design students who understand some dynamics in information presentation. On the local front, there is almost no existence of such studies.

Amid this situation, some scholars like Schmidt (2013) looked at educators' perceptions in an online survey of teachers at a university faculty. The 277 participants reported that students possessed general new media literacy competencies. Participants reported that students were generally most competent in media access (locating relevant information on the internet or in print) and least competent in analysing media (including understanding media publishers' intended message and perspectives). Media analysis skills specifically analysed advertising, music, television, and online content. The study again suggests that students of various grade levels may have limited new media literacy skills, especially when analysing messages in online content. The study also showed that new media literacy was covered more commonly in post-secondary education than in earlier grades (Schmidt, 2013).

In another study, Ambrose (1996) examines senior high school students' responses in a study employing qualitative and quantitative data-gathering techniques at a media literacy unit called The News. Students from the same school were observed in a natural classroom setting. Data were collected from the daily observation of students, class assignments and activities, student journal entries, and the administration of a questionnaire on three separate occasions. The data analyses showed that many factors influence students' responses. There was a noticeable difference in how female and male students responded to media discussions, written assignments, and oral presentations. Although variations also were noted in gender preference of media and the length of time girls and boys spent enjoying a particular medium, adolescents reported audio-visual and audio as their first choices over print media. This preference reflects the portability of these media for adolescents. It also suggests that new media literacy courses need to include multimedia instruction. How students apply their new media literacy to real-life situations is an area that this study examined only through student reports.

Although the reviewed studies relate to students in a learning frame, their focus does not regard skilled students who can design and produce content for social media. However, this study gives recognition to Graphic design students and seeks to discuss findings by performing a valid new media literacy check. This also contributes to the existing body of knowledge as it expands on "students" as mainly used in studies.

#### 2.2 Theoretical Framework

An identifiable role of this study is performing a check on new media literacy. Another recognisable variable is the social media component and its users, who are design students. This study also acknowledges social media as part of the new media (Manning, 2014). It initiates an idea for a framework that factors these variables and measures to perform a valid new media literacy check. In finding a framework that features these key variables connecting the existing body of knowledge and explaining concepts relevant to this study, the refined New Media Literacy Framework (NMLF) is adopted. The framework forms the analytical foundation and is used as a lens to investigate the phenomenon.

Chen, Wu & Wang (2011) initially propounded the New Media Literacy Framework. It was expounded by Lin, Li, Deng, and Lee (2013). Chen et al. (2011) explain the NMLF to stem from researchers perceiving new media literacy 'as a combination of information skills, conventional literacy skills, and social skills' or multiliteracies. The framework was criticised for overlooking the significance of new media's technical and socio-cultural characteristics. Thus, shaping what New Media Literacy (NML) can and should be. This gap is addressed in Chen et al. (2011) proposed framework that reveals NML as four-continua from consuming to prosuming media literacy and functional to critical media literacy.

Specifically, 'consuming' media literacy describes the ability to access media messages and utilise media at different levels. In contrast, 'prosuming' media literacy describes the ability to produce media content (e.g., messages and artefacts). According to Chen et al. (2011), the consuming aspect should be integrated and implied in the prosuming part. For instance, an individual must read and understand others' ideas before creating media content to respond. On the other hand, 'functional' media literacy refers to individuals' 'textual meaning-making and use of media tools and content' (Chen et al., 2011, p. 86), while 'critical' media literacy is their ability to analyse, evaluate, and critique media. Similarly, the functional aspect provides an essential basis for the critical aspect. However, Lin et al. (2013) NMLF four-continua is further expounded by ten indicators in the framework (see Figure 1).



Figure 1: Framework for New Media Literacy (from Lin et al. (2013))

The four-continua are: Functional Consuming is an individual skill to access the content of media and understand its meanings. This set of skills comprised two indicators: consuming skill and understanding. Critical Consuming refers to the ability of individuals to interpret the content of media towards social, economic, politics, and culture. This skill requires three indicators: analysis, synthesis, and evaluation. Functional Prosuming is mainly related to the ability to participate in creating media content. It consists of three sub-skills: prosuming skill, distribution, and production. Critical Prosuming is a set of skills that requires a contextual interpretation of media. It is usually measured by an individual's participation.

#### 3. Methodology

The study adopted a quantitative descriptive survey design to identify, analyse, and describe design students' new media literacy skills using social media. The approach used offers an accurate population description and prediction.

This study's population comprised students at the Department of Graphic Design at the University of Education, Winneba (UEW) in Ghana. Third and final-year students were selected purposively. Their selection was based on having undergone much training in design as compared to the first- and second-year students. These design students were from Graphic design, Advertising, and Multi-media backgrounds. As part of ethical consideration, permission was sought from the head of the department, whose approval helped acquire data from the participants. Participants were first explained the project, followed by a structured questionnaire based on the indicators of the new media literacy framework proposed by Lin et al. (2011). The questionnaire comprised twenty-four (24) scaled responses and eleven (11) fixed response slots to select from. A total of 160 responses were received, of which 150 questionnaires were completed.

Data were analysed using Statistical Package for the Social Science (SPSS) software version 22 for Windows. The one-way analysis of variance (ANOVA) test was performed to determine whether the predictors influence the dependent variable. Thus, whether social media, age, current level, and area of specialisation influence the student's knowledge of new media literacy.

#### 3.1 Presentation and Analysis

One hundred fifty students were drawn from Graphic Design, Advertising, and Multi-media students of UEW. Level 300 students comprise 97, representing 64.7% of the respondents, with the remaining 35.3% being level 400 students.

Table 1: Demography of the Respondents				
		Ν	Percent	
Factor Current Level	Level 300	97	64.7%	
	Level 400	53	35.3%	
	Total	150	100.0%	
Gender	Male	104	69.3%	
	Female	46	30.7%	
	Total	150	100.0%	
Area of Specialization	Graphic Design	74	49.3%	
	Advertising	25	16.7%	
	Multimedia	51	34.0%	
	Total	150	100.0%	

The distribution in terms of gender is 69.3% male and 30.7% female. Distribution according to the area of specialisation is Graphic Design 49.3%, Multimedia 34.0%, and Advertising 16.7%. An indication that all the respondents are design students. **Table 2: Distribution of Social Media Apps Usage** 

		Responses		
		Ν	Percent	Percent of Cases
Social Media Apps <sup>a</sup>	Facebook	126	16.9%	84.0%
	Instagram	125	16.7%	83.3%
	WhatsApp	148	19.8%	98.7%
	Twitter	75	10.0%	50.0%
	Telegram	90	12.0%	60.0%
	TikTok	47	6.3%	31.3%
	YouTube	136	18.2%	90.7%
Total		747	100.0%	498.0%

Table 2 depicts the social media apps usage of the design students. There is a total of 747 responses. The results show that 19.8% of the students are WhatsApp users, 18.2% are YouTube users, 16.9% are Facebook users, 16.7% use Instagram, and 6.3% are TikTok users. An indication that the majority of the students use multiple social media apps. The social media app used by most design students is WhatsApp. **Table 3: Descriptive Statistics on Students' Social Media Usage** 

	N	Mean	Std. Deviation
I use social media often	150	4.51	.903
I have a personal social media blog/channel/account	150	4.09	1.228
I use social media basically for finding information	150	4.25	1.068
I use social media for communication purposes	150	4.36	.992
I use social media to share with friends, updates on personal activities	150	4.08	1.126
I use social media for reading news online	150	4.19	1.058
As a design student, I use social media as a platform to exhibit my works	150	4.35	.991
I learn from co-designers on social media	150	4.55	.938
I get to see new design trends on social media which I adopt	150	4.41	.991
I perform design activities as a freelancer on social media	150	3.89	1.179
I pick up educational resources relevant to my field of specialisation from soci media	<sup>al</sup> 150	4.30	.954
I use social media as an outlet to educate people through works I design/produce Valid N (listwise)	150 150	4.21	1.001

In understanding how Graphic design students use social media, 12 item statement is given to the students to test how familiar they are with social media apps. Table 3 presents the results. With the mean score of all the

items close to 4 or 5, it is clear that most students either agreed or strongly agreed with the statements. This indicates that design students use social media to find information, read news online, exhibit their works and educate people. Design students also learn from co-designers using social media. This suggests that most design students exploit social media to their advantage.

Table 4 presents descriptive statistics on new social media literacy skills. The means of all the items show that most design students are well aware of the new social media literacy skills. Most design students can use social media devices in a technical sense and can purposefully choose between different media devices per their functions on their devices. It is also clear that most design students can use different sources of information and media devices. Design students are aware of their own media behaviours and its effect. It is also clear that most design students can use for an origin student scan create social media content. They can also communicate and present content using social media. This means that most design students have acquired new media literacy skills. Table 4: Descriptive Statistics on Level of Students New Media Literacy Skills

	Ν	Mean	Std. Deviation
I can use media devices in a technical sense	150	4.59	.787
I can purposefully choose between different media devices based on their function or activities to perform on social media	ons 150	4.42	.884
I can purposefully use different sources of information and media devices		4.46	.783
I know that social media selectively represent information and know-how interpret media messages	to <sub>150</sub>	4.19	.908
I know how social media production and distribution works as a design student	150	4.06	.892
I know how social media content is tailored to the target audience	150	4.20	.962
I can evaluate social media content by taking into account various criteria	150	4.21	.864
I am aware of the effects of social media	150	4.42	.869
I am aware of my social media behaviour	150	4.39	.918
I can create social media content	150	4.31	.883
I can communicate and present content using social media	150	4.25	.921
I can participate in the public debate through social media	150	4.08	1.059
Valid N (listwise)	150		

Statements were posed from the four-continua of the New Media Literacy Framework by Lin et al. (2013).

Regression analysis is conducted to establish what influences design students' new media literacy skills. Tables 5 and 6 present the regressions analysis results. The predictors are social media use by design students, the design students' level, the design students, the gender, and the area of specialization of the design students. The dependent indicator is new media literacy skills. Table 5 depicts the ANOVA table. From the ANOVA results show a p-value of 0.0000. It indicates that the regression model between the predictors and the dependent variables is good.

# Table 5: ANOVA<sup>a</sup>

Model 1		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4691.602	4	1172.900	49.715	.000 <sup>b</sup>
	Residual	3420.938	145	23.593		
	Total	8112.540	149			

The rest of the predictors are statistically insignificant. This indicates that design students acquiring new media literacy skills statistically do not depend on the current level of the design students, the gender of the students, and the area of specialisation of the students. It is statistically evident that the application of the new media literacy skills by design students dramatically affects the student's ability to use social media extensively. Table 6 depicts the coefficients of the predictors of the regression model. The coefficient of social media usage is 0.65. This figure is statistically significant at 5% significance level.

## Table 6: Coefficients<sup>a</sup>

Model	Unstandard B	ised Coefficients Std. Error	Standardised Coefficients Beta	t	Sig.
l (Constant)	18.905	3.229		5.855	.000
Social Media Usage Information	.652	.050	.730	13.069	.000
Current Level	-1.160	.888	075	-1.306	.194
Gender	079	.905	005	087	.931
Area of Specialisation	.515	.448	.063	1.150	.252

#### 4. Discussion of Findings

Social media usage is on the increase, and social media apps are also on the increase. Design students bracing themselves with a new skill in social media application has a lot to do with their future job market. This study establishes that design students use social media extensively, with WhatsApp being the most used social media app. It is also clear that most design students have new media literacy skills as they understand the use of social media and influence.

This study aimed to determine the extent design students are aware of new media literacy skills towards social media use. Its sub-objective explored social media usage patterns of Graphic design students in their capacity as content creators. In achieving these objectives, the new media literacy framework (NMLF) was used to provide the theoretical basis for checking the new media literacy skills of Graphic design students. Thus, checking new media literacy skills was based on the four-continua of NMLF as expounded by Lin et al. (2013), which served as indicators for the new media literacy check.

From the NMLF, the functional consuming component (indicator) enabled checking students' ability to access social media content and understand its meanings. From questions posed for the questionnaire, the analysis revealed a minimum mean of 4.19, indicating Graphic design students possess the skill of accessing and understanding social media content. This suggests identifying Graphic design students to understand how the information ought to be accessed, hence providing visual content for information. It again suggests a hint of design students being contributors to social media content since they can access, understand and add more content. This present study's findings corroborate the findings of Atmi, Satibi and Cahyani (2018). Their similar study sought to find out how students (teenagers) in urban Indonesia possess media literacy skills on the use of social media. The functional consuming indicator recorded a mean of 2.9 in the medium category of media literacy skills. These indicate that students cannot only access social media content but understand concepts or information used on social media. Support is also found in the studies of Alhajiri and Mansour (2018) whose study denoted how graphic design exhibited a wonderful experience through teaching and learning of Graphic design at the higher education level using social media. Interactivity, sharing works among themselves, elearning and uploading course content on social media identified practical indicators. These indicated how Graphic design is supported and accepted by social media systems, confirming that Graphic design students have the ability and skills to read, design and access social media content to understand its meanings.

Checking for Graphic design students' skills to evaluate social media content, considering various criteria, was required for the critical consuming indicator. From the questionnaire, respondents recorded a (minimum) mean of 4.21, suggesting that Graphic design students possess a high level of this skill. Thus, Graphic design students can analyse, synthesise and evaluate social media information based on specific criteria, be it entertainment, politics, lifestyle and others. This finding supports previous research by Chang and Fang (2018), who identified Graphic design students as contributors to social media information in two contexts. Active contributors as social media users and upcoming professionals. Chang and Fang (2018) point out that the firm design education received enables design students to be good at analysing, synthesising and making evaluations of social media content visually and textually to fit the dimensions of any criteria set.

The functional prosuming component of the framework focused on the ability to participate in creating content. Aside from these abilities, the sub-skills required the prosuming skill, production and distribution skills of social media content. The results of previous research by Atmi, Satibi and Cahyani (2018) on teenagers' media literacy skills and social media use, particularly functional consuming was not different from the findings of this study. It recorded medium in the category with a mean of 2.9 on skill distribution of social media content and 2.7 mean on social media content creation. Comparatively, the design students recorded high mean figures

(4.06 and 4.31, respectively). It can be suggested that the background Graphic design students emphasize the creation of designs and how they can share or distribute information on social media. It is again not surprising data set revealed how Graphic design students educate, pick up educational resources, learn from co-designers and exhibit works. These are particular traits of abilities of prosuming, production and distribution skills shared on social media and beyond by design students.

The last indicator of the NMLF, the critical consuming is a set of skills that requires a contextual interpretation of media. This mainly was relevant as design students are expected to have abilities that demand the skill to interpret contextual information developed or encountered on social media. From the respondents, a significant value of mean (4.21) was recorded. This finding, with support from design students, accords with the study of Solomon (2012). His findings suggested that participation in social media requires the ability to access, analyse evaluate and produce information for specific outcomes.

## 5. Conclusion

This study sought to investigate the extent to which design students are aware of new media literacy skills, especially regarding social media use. Acknowledging social media as a form of new media, the acquisition of new media literacy skills is necessary for today's social media users, particularly design students who are considered contributors to content creation on social media platforms. New media literacy from the literature shows the ability to access, analyse, evaluate, and produce information for specific outcomes (Solomon, 2012).

This research contributes to the existing knowledge of Graphic design and new media literacy. The purpose of this study was to find out the extent. Graphic design students are aware of new media literacy skills in their use of social media. The results seem to suggest that Graphic design students have good knowledge of new media literacy skills, particularly aspects of critical consuming, functional consuming, critical prosuming and functional prosuming skills, as by the framework of Lin et al. (2013) used for this study.

# 6. Limitation and Future Study

One evident limitation was the sample size of the present study. Although not negligible, homogenous participants would have enriched the active participants of the study. Thus, Graphic design students from other universities. It is in the sense that most Graphic design programmes have different curriculum orientations resulting in different tracts of Graphic design study. It again justifies Graphic design students' background against the new media literacy check. Identifying this limit, the current study, particularly regarding the generalisation of Graphic design students.

Future studies could consider the inclusion of other design students from other universities. Their inclusion is to provide a solid ground for Graphic design students as used in the context of this study.

The broad set of data on design students with acquired new media literacy skills, which was statistically insignificant based on the finding not depending on the current level of the design students, gender and the area of specialisation of the students, could be further tested with homogenous participants to check for findings capable of being identical or different.

Other researchers from the interest of this study can seek to establish the relationship between the study design and its attribution to high new media literacy skills among design students.

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