

The Role of Media and Information Literacy (MIL) in Tertiary Education Curriculum: A Comparative Analysis of College of Education and University Students in Northern Nigeria

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Abstract

This paper aims at evaluating the impact of Media and Information Literacy (MIL) skills among students in northern Nigeria's tertiary institutions. The two specific hypotheses of this study were to determine: if there is no significant difference between the acquired MIL cognitive skills of the college of education and university students, and likewise, if there is no significant difference between the acquired MIL psychomotor skills of the college of education and university students. This paper adopted a survey design and multistage sample (convenient, cluster and purposive sample) in sampling the institutions and participants. A sample size of 384 (5% margin of error and 95% confidence interval) was drawn (using the survey monkey sample calculator) from a population of 11,050 students. Data were collected through a questionnaire and analyzed using t-test, mean, and standard deviation statistical tools with the aid of SPSS. The findings indicated that students in the College of Education possessed more cognitive and psychomotor skills than their counterparts in the university. Based on the results of the study, the authors recommend the need for a Media and Information Literacy course in the university curriculum to equip university students with the cognitive and psychomotor skills to navigate the complex media environment in the current digital age.

Keywords: media, information literacy, college of education, university, curriculum, students,

Introduction

The digital age has transformed the way audiences interact with the media and assimilate information (Agba, Abang, & Ogri, 2019). While the media provides audiences with a wealth of information, it also presents new challenges, including the need for media and information literacy (Lin, Mokhtar, & Wang, 2013; Abu-Fadil, 2016). Many countries around the world are gradually cueing in on the need to formally teach students the necessary media and information literacy skills to cope with the media-saturated world (Berger, 2019; Carlsson, 2019; Chen, 2007; Kubey, 2004; Rusiana & Naparota, 2021; Wilson, 2019).

The MIL program, for example, was launched in the United Kingdom around the year 1933 (Chen, 2007). By 1988, Canada had adopted MIL into the curriculum of every province and territory (Wilson, 2019). The United States followed in the late 1960s, more than a decade later (Chen, 2007; Kubey, 2004). And, by 1997, Singapore had incorporated MIL into its school curriculum (Lin, Mokhtar, & Wang, 2013). It was not until 2020 that MIL was mainstreamed into the 2020 edition of the minimum standards for education in Nigeria. UNESCO, in collaboration with the National Commission for Colleges of Education, organized a train-the-trainer workshop across the six geopolitical zones in Nigeria from October 14–17, 2020. The workshop was shrouded with the objective of training teacher educators on the effective delivery of the content of a new general studies education course (media and information literacy).

Media and information literacy (MIL) is deliberately designed to equip students with media and information skills. First, students will be able to access information. Second, they will be able to share information. Third, they will be able to verify the information. Fourth, it encourages students to create and share factual content with others (Nosa, Ifedolapo, & Abiodun, 2019; Carolyn, Allen, Ramon, Kwame, & Chi-Kim, 2011). This implies that at the end of the course module, students should be able to access, search, analyze, create, share, and evaluate media content and information. From the foregoing, the inclusion of MIL into the Nigeria Certificate in Education (NCE) curriculum cannot be overemphasized considering the recent increase in the usage of social media as a medium of communication (Aditi, Hemank, Ponnurangam, & Anupam, 2013). Students have evolved from passive information receivers to active content creators (Nosa, Ifedolapo, & Abiodun, 2019). More often than not, users devote a considerable amount of time interacting online (Jana & Sophie, 2019). Indeed, the volume of information posted and shared on social media is in the media (Kabiru & Ibrahim, 2022). For example, in Nigeria, the Nigerian Communication Commission (mentioned in Victor, 2022) revealed that there are over 140 million internet subscribers in Nigeria. Notably, most of these internet subscribers are exuberant youths (Gautam, Ravinder, Vigneswara, & Arpan, 2019). And, these youths depend on social media for news, and in turn, social media provide various discussions and opinions on current or stale issues.

Based on the foregoing, this paper aims to evaluate the extent of MIL skills (i.e. newly introduced course) acquired by students in colleges of education as against their counterparts in the university with no MIL course in their curriculum. The specific hypotheses of this study are:

1. There is no significant difference between the MIL cognitive skills of the college of education and university students.

2. There is no significant difference between the MIL psychomotor skill of college of education and university students.

The outcome of this study is expected to provide curriculum developers, NGOs and other stakeholders with useful information on improving the content of MIL courses and expanding the implementation of MIL across other levels of education.

Literature Review

Concept of Media and Information Literacy

Media and Information Literacy entail two forms of literacy: media literacy and information literacy. On one hand, media literacy emphasises the ability to critically analyse and evaluate what we see, read, and hear in the media (McNulty, 2021). From McNulty 's point of view, Malik (2008) argues that media literacy is more than just consuming information; it is the ability to produce, create, and successfully communicate information in all its forms. Information literacy, on the other hand, means a set of abilities requiring individuals to recognise when information is needed and the ability to locate, evaluate, and use the information to find, retrieve, analyse, and use it (Association of College and Research Libraries, 2000). Based on the ACRL's definition, information literacy is more than just a set of skills and includes knowing when and why information is needed, where to obtain it, and how to successfully search, assess, and apply that information (Lalduhuali, Amit, Dibanjyoti, & Manashjyot, 2022).

Over time, the concept of MIL has been considered a terminology. Lee (2010) sees media and information literacy as the development of abilities that enable people to comprehend, create, and evaluate media information. United Nations Education, Scientific and Cultural Organisation (2018) defines MIL as a set of competencies that include the ability to search, critically evaluate, use, and contribute information and media content wisely; knowledge of one's rights online; understanding how to combat online hate speech and cyberbullying; understanding of the ethical issues surrounding the access and use of information; and engaging with media and ICTs to promote equality, free expression, intercultural and interreligious dialogue, peace, etc. MIL is an empowerment project that aims to prepare people to understand the media culture in which they live (Al-Zoubi, 2021).

Media and Information Literacy in Nigeria Certificate in Education (NCE) Curriculum

Several conditions are necessary for the emergence of a coherent and comprehensive curriculum for MIL (Frau-Meigs, 2019). UNESCO started a comprehensive project to produce a MIL Curriculum for Teachers around 2011 (Carlsson, 2019). The development grew out of the opinion that MIL should be like every other course for all children from the very beginning. To further emphasize this work, UNESCO convened, also in 2013, in the capital

city of Nigeria-Abuja, for a conference, titled ‘Global Forum for Partnerships on Media and Information Literacy (MIL).

However, there have been debates on the design and delivery of MIL curriculum in low and higher education considering the state of development around the world (Hobbs, 2004). For example, Chen (2007) observed that the United States curriculum suffered between the goals of helping students get a job and training them to be more critical citizens in a democratic society. Likewise, in Nigeria, the minimum standard (policy document) is designed not only to provide a minimum benchmark for the award of the Nigeria Certificate in Education (NCE) programme but also to produce teachers with appropriate knowledge, values, skills, and attitudes that would facilitate easy achievement of the national goals. By the new revised minimum standard, MIL was among the newly introduced general studies education courses designed to expose students to a variety of knowledge across disciplines. It aims to enable students to appreciate the relationship among disciplines in an integrated world, which has become a big global village due to advances in science and technology that have broken traditional boundaries in human knowledge and communication.

The course is deliberately designed to be taught across four semesters, starting in year one and terminating in year two. According to the Federal Government of Nigeria (2020) scheme of work, the first semester (GSE 000A) includes preliminary MIL aspects such as the definition of concepts (MIL); Democracy and MIL; Media Content and its Uses; News Reporting; The Power of the Visual and Language; Contexts of Representation of Gender and Disasters; Language and Visuals; MIL Code of Ethics; Application of codes of ethics to various media; Concept of Audience in MIL; Types of Audiences; and How Audiences negotiate meaning in MIL." The second semester (GSE 000B) consists of the following: "Accessing Information; Stages of Information Problem-Solving; Types of Information; Potential Sources of Information; News Reporting; Sources of the Visual; Contexts of the Representation (Gender and Disasters); Codes and Ethics of Representation; and Description of Television, Films, Book Publishing, and Feature Films; Nollywood Community and Indigenous Stories." While, the third semester (GSE 000C) includes: "Representation in Films, Books, Feature Films, and the Nollywood Community; Indigenous Stories; Representation in Music Videos; Advertising and Public Service Announcements; Advertising regulations; Application of regulations to current advertisements; Public Service Announcements; Advertising and Sponsorship; Claims and Appeals in Advertising and PSAs; and Analysis of Political Adverts." And, the last semester (GSE 000D) includes: "MIL communication, library, and digital skills- -definition of concepts, stages of information literacy, sources of information (library, internet, and media); a brief history of the media; differences and use of new and traditional media; challenges and risks of new technologies; socio-cultural dimension of global media; and technology convergence."

Role of Media and Information Literacy

Previous MIL studies have had an impact on audiences in a wide range of media and information subjects (Al-Zoubi, 2022; Scull & Kupersmidt, 2011; Schmidt, 2012; Rusiana & Naparota, 2021). For example, studies on the skills needed to detect fake news found that teaching MIL provided students with the skills needed to cope with the news of the twenty-first-century media, particularly in terms of news reliability and source credibility (Al-Zoubi, 2022; Dayanan, 2014; Goodfellow, 2017; International Research and Exchange Board, 2018; Van de Vord, 2010). Students who received MIL intervention were able to determine the reliability and credibility of false news and headlines presented in mainstream news (Guess et al., 2020). Similarly, depending on the social media platform, students were more likely to dismiss news stories as untrustworthy. According to Stewart (2019), students preferred news on Instagram and Snapchat to a greater extent than new stories on other social media platforms like Twitter and Facebook. This further reiterates the need for social media such as Facebook and Twitter, among others, in addressing the issue of fake news and calls for an increased number of fact-checking sites (Goodfellow, 2017). Contrary to the aforementioned studies, Abbasi & Huang (2020) observed that youth in Pakistan were poor at identifying fake news because they did not seek to establish the source of information. On this note, Jones-Jang and Jingjing (2019) contend that false news is much more likely to be identified by students with high levels of information literacy.

In the same mood, it was adjudged that MIL is a reliable and valid measurement instrument that has provided students with the skill to effectively access, evaluate, analyse, create, and respond/communicate (Al-Zoubi, 2022; Boruah & Bora, 2019; Omar, 2018; Rusiana & Naparota, 2021; Zhang & Zhu, 2016). Students were able to identify information presented to them via traditional media as well as social networking platforms (International Research and Exchange Board, 2018). In the same mood, students were able to engage critically with online news (McDougall, 2019).

Concerning creative critical thinking skills, Austin and Pinkleton (2016), Gretter & Yadav (2016), Zhang & Zhu (2016), Al-Zoubi (2022), Valtonen, Tedre, & Makitalo (2019) studies observed a strong influence of MIL on creativity, critical thinking, and problem-solving in ICT society. Hobbs (2004) explains that the implementation of media literacy drove student attention towards critical-thinking skills, political activism, communication skills, and many more. But on a broader level, MIL education in Japan focuses on promoting cultural and traditional values (Murakami, 2014). In Hong Kong, the emphasis was on developing the skills of the students, while mainland China focused on leading students to better understand the uses of media and information (Lee, 2014). From another dimension, Dayanan (2014) students have a low capability in understanding many of the ethical and legal issues and in using information ethically and legally. It was also observed that the level of news media literacy was moderate

and that educational level and age were stronger predictors of the student's level of news media literacy than media literacy education itself (Kleemans & Eggink, 2016).

Theoretical Framework

This study is anchored on the Knowledge Gap Theory developed by P.J. Tichenor, G.A. Donohue, and C.N. Olien in 1970 (Asemah & Yaroson, 2008; Aneato, Onabajo, & Osifeso, 2012). Knowledge gap theory, according to Aneato, Onabajo, & Osifeso (2012), among others, holds the assumption that as media output grows in a given society, so will the knowledge gap between privileged and underprivileged social classes. That is, the status of the audience determines the assimilation of knowledge. The privileged audience will acquire information much faster because of the means of modern mass communication technology than the less privileged audience. Tichenor, Donohue, & Olien (mentioned in Aneato, Onabajo, & Osifeso, 2012) acknowledge that the nature of the mass media system itself is geared towards people with higher socioeconomic status. Thus, Ojobor (cited in Anaeto, Onabajo, & Osifeso, 2012) warns that any discussion of mass media effects must take into consideration the fact that these knowledge gaps exist and that the level of knowledge of an individual explains the degree to which he is exposed to the mass media.

The theory is considered here in light of the recent mainstreaming of media and information literacy into the 2020 NCCE minimum standard. The assumption here is that students that have been taught media and information literacy over a given period would be more knowledgeable than those that are not been taught. It is on this note that the study adopts the knowledge gap theory since it argues that as media output grows in a given society, so will the knowledge gap between privileged (NCE students) and underprivileged (non-NCE students) social classes.

Methodology

This paper adopted a survey research design since it is efficient, easier, and allows anonymity and generalization of information from a large population (Cohen, Manion, & Morrison, 2007). A sample size of 384 (with a 5% margin of error and a 95% confidence interval) was drawn (using the survey monkey sample calculator) from a population of 11,050 students for the academic year 2020–2022. A multistage sample was adopted, sampling institutions and participants. This method is adopted because it is a kind of sample that precedes another and influences the proceeding sample (using a probability and non-probability sample, namely: a convenient, cluster and purposive sample) (Louis, Lawrence, & Keith, 2018). First, the researchers conveniently selected one college of education and university (Federal College of Education (Tech), Bichi-Kano State, and Tafawa Balewa University, Bauchi State). Second, a cluster sample was used to group students into different schools/faculty. And, finally, the researchers selected members (192 persons) across the cluster (i.e. the various

schools/faculties) in the selected tertiary institutions using a purposive sample. Following that, data were collected using a questionnaire (a set of 12 questions was designed to assess the participant's cognitive skills, while 10 questions were designed to assess psychomotor skills). The data collected for this survey were analysed using SPSS's T-test, Mean, and Standard deviation statistical tools.

Data Analysis and Findings

This study provides an analysis of student's cognitive and psychomotor skills acquired through MIL in Northern colleges of education and universities.

Table 1: t-statistics on cognitive skills among NCE and university students

Variable	Categories	N	Mean	SD	Sig.	Decision
t-test	University	384	1.43	.443	.000	Rejected
	College of Education		1.53	.458		

The result of the analysis in Table 1 revealed the mean, standard deviation, and level of significance for the null hypothesis: there is no significant difference between MIL cognitive skills among NCE and university students. The university has a mean of 1.43 and a standard deviation of .443, while the college of education has a mean of 1.53 and a standard deviation of .458. And, a calculated p-level score of .000. The presentation implies there is a significant difference between MIL cognitive skills among NCE and university students. Because the p-value (.000) was less than the level of significance (0.05), this hypothesis was rejected. Also, the mean score of the college of education was greater than that of the university. Compared to the result from Scull & Kupersmidt (2011), they argued that even single-day training was effective in improving the participants' knowledge of MIL.

Table 2: t-test statistics on the psychomotor skills among NCE and University students

Variable	Categories	N	Mean	SD	Sig.	Decision
t-test	University	384	1.39	.407	.000	Rejected
	College of Education		1.504	.289		

The analysis revealed the mean, standard deviation, and level of significance on the null hypothesis—there is no significant difference between MIL psychomotor skills among NCE and University students, as shown in Table 2. The table shows a mean of 1.39 and a standard

deviation of.407 for universities, while the same table shows a mean of 1.50 and a standard deviation of.289 for colleges of education. and a calculated p-level score of.000.

The demonstration suggests there is a significant difference between NCE and university students concerning MIL psychomotor skills. Because the calculated p-value (.000) was less than the level of significance (0.05), this hypothesis was rejected. Furthermore, the mean score of a college of education was higher than that of a university. This finding is consistent with Dayanan's (2014) study, which assessed third-year students' MIL skills and concluded that they are highly capable of critically evaluating information and its sources, as well as incorporating selected information into their knowledge base and value system.

Discussion of Findings

According to the first hypothesis, there is a significant difference in MIL cognitive skills between -NCE and university students. The result further implies that the MIL course had a greater impact on cognitive skills in college education students. This result aligns with the findings of Austin and Pinkleton (2016) that MIL places an important role in young people's thinking skills. Other studies have found that MIL education has given students the ability to understand media, types of media, forms of media, sources of information, code and ethics of representation, advertising regulation, fake news, and hate speech (Al-Zoubi, 2022; Boruah & Bora, 2017; Boruah, 2019; Omar, 2018; Rusiana & Naparota, 2021). Although Dayanan (2014) observed elsewhere that students have low capabilities in understanding many of the media and information's ethical and legal issues, this further proves the assumption of the knowledge gap theory that, as the means of communication output grow in a given society, so will the knowledge gap between those with formal education in MIL and those without it (Asemah & Yaroson, 2008; Aneato, Onabajo, & Osifeso, 2012).

The second hypothesis found that NCE students had more MIL psychomotor skills in today's media-saturated world. This supports the assumption of the knowledge gap theory that knowledge gaps occur only when some people receive formal education on MIL while others do not (Asemah & Yaroson, 2008; Anaeto, Onabajo, & Osifeso, 2012). Supporting the findings of the study, McDougall (2019) and the International Research and Exchange Board (2018) observed that students were able to distinguish information presented to them on both traditional and online media and engage critically with online news. Furthermore, Al-Zoubi's (2022) research on students in the faculty of education at AlBays University Jordan found that studying MIL has an impact on students' acquisition of the skills required to detect fake news. In the same vein, Omar (2018) observed that MIL has made students know how to use media for analysing and responding to messages and information. Similarly, Zhang & Zhu (2016) found that most primary school students in Beijing's 5th and 6th grades have the strong critical thinking, understanding, and technical skills when it comes to MIL. According to Valtonen, Tedre, & Makitalo (2019), MIL has helped students improve their technological innovation.

Hobbs (2004) adds that the implementation of MIL from kindergarten to 12th grade (K-12) has also improved students' attention to critical-thinking skills, political activism, communication skills, and many other areas. In contrast, Abbasi & Huang (2020) discovered that students in Pakistan were poor at recognising fake news. Other studies attribute the problem to the regional differences in terms of their educational practises (Al-Zoubi, 2022; Dayanan, 2014; Goodfellow, 2017; International Research and Exchange Board, 2018; Van de Vord, 2010). Students in some curricula were exposed to more course content related to media and information uses (Schmidt, 2012; Lee, 2014), while others were exposed to more course content related to media analysis (Schmidt, 2012). Others place a premium on understanding cultures and traditions, as well as how technology and media influence how people live (Murakami, 2014). Thus, it is important to stress that technical skills are an absolute prerequisite for being able to put MIL practice time (Reineck & Lublinski, 2015).

Conclusion

The findings indicate that the inclusion of MIL in the curriculum of colleges of education had an impact on students in northern colleges of education. Findings show a significant difference in cognitive and psychomotor skills among students at universities and colleges of education. Evidence indicated that college education students possessed more cognitive and psychomotor skills than their counterparts in the university.

Recommendations

Based on the results of the study, the authors recommended: -

1. the need for a MIL course in the university curriculum to be designed in order to equip university students with cognitive and psychomotor skills.
2. to navigate the complex media environment and improve the cognitive and psychomotor skills of university students in the current digital age.

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