

Media and Information Literacy (MIL) competencies of language and communication students

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ABSTRACT

This descriptive study aims at identifying the level of media and information literacy (MIL) competencies of Language and Communication students in the Philippines using UNESCO's Access, Evaluation and Creation components. A self-report survey of a small sample of university students was conducted and findings show that respondents have an intermediate MIL competency along the three components. But most participants struggled to recognize the concept of metadata and indexing and the practice of creating arguments using evidence and drawing conclusions from information. They also struggle with the application of international standards and requirements for new knowledge creation in an ethical manner. These findings indicate the need for continuous development of language and communication students' MIL competencies as these are vital to the formation of tomorrow's teachers, as well as communication and media professionals.

Keywords: *Philippines, higher education, media literacy, MIL, prosumership, empowerment.*



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INTRODUCTION

Literacy, a vital survival tool in today's knowledge society (Richmond et al., 2008) means knowing how to "read" media texts (Inan & Temur, 2012) as it involves more than the encoding and decoding of linguistic elements (Kinzer, 2010). The United Nations Educational, Scientific and Cultural Organization (UNESCO, 2013) emphasizes that being literate means having the ability to interpret and make informed judgments as skillful prosumers of media texts.

In 2011, UNESCO's Media and Information Literacy (MIL) Curriculum and Competency Framework combined media literacy and information literacy into one umbrella (Alagaran, 2012). The framework is contained in Wilson et al.'s (2011) UNESCO MIL Curriculum for Teachers which aims to capacitate educators the "essential competencies that allow citizens to engage with media and other information providers effectively, and develop critical thinking and life-long learning skills for socializing and becoming active citizens" (p.187). MIL's ecology is a composite of 12 literacies: (1) media literacy, the ability to read, analyse, evaluate, produce communication in different formats, (2) information literacy, the ability to recognize when information is needed, and to locate, evaluate, effectively use and communicate information in various formats, (3) library literacy, the ability to utilize a library, (4) Freedom of Expression (FOE) and Freedom of Information (FOI) literacies, the ability to recognize and assert the basic human rights on access to information held by public bodies, and of free speech, (5) digital literacy, the ability to use digital technology and communication tools network to locate, evaluate, use and create information, (6) computer literacy, the ability to use, access and create information through a computer, (7) internet literacy, the ability to seek out information utilizing the internet, (8) games literacy, the ability to play, make or understand meanings with respect to games, (9) cinema literacy, the ability to understand and appreciate moving images, (10) television literacy, the ability to critically evaluate television content (11) news literacy, the ability to access, analyse, evaluate and participate in news' various forms, and (12) advertising literacy, the ability to critically decode advertising messages (UNESCO, 2011). These literacies are mapped out to support the learning and teaching of MIL as one would come across them in the process. It was also UNESCO's way of harmonizing the various literacies in the light of the

converging delivery platforms; hence, the use of MIL covers all other literacies outlined in its ecology.

In addition, there are three MIL broad components which are also the basis of the UNESCO-developed MIL Competency Matrix under the Global MIL Assessment Framework: Country Readiness and Competencies (2013) Tier Two; these are Access, Evaluate and Create.

Media education has substantially matured in Western countries (Fedorov, 2003), especially in English-speaking countries (Cheung, 2009; Kellner & Share, 2005; Polakevičová & Lincényi, 2016). Polakevičová & Lincényi (2016) surfaced that Canada introduced media education in 1987; Australia also made media literacy as a compulsory component in their English subject in the 20th century. United Kingdom teaches critical thinking and analysis of media text as part of their English subject (Brestovancy, 2010 as cited in Polakevičová & Lincényi, 2016). While it has been reported that the United States lags behind other English-speaking countries due to each state having its own administration (Fandelová & Lesková, 2010, as cited in Polakevičová & Lincényi, 2016), the U.S. Media Literacy Policy Report released in 2020 revealed that Ohio and Florida have the strongest media literacy education in K-12 schools (Media Literacy Now, 2020). Additionally, the various approaches in media education also provide evidence to the state of media education among Western countries, including protectionist approaches (Kellner & Share, 2005; Polakevičová & Lincényi, 2016), empowerment paradigms such as MIL (Cheung 2009; Cheung & Chau, 2017; Wilson, 2012), critical media literacy (Kellner & Share, 2005), critical thinking (Fedorov, 2003; Wade, 2014) and sociocultural approaches (Fedorov, 2003; Polakevičová & Lincényi, 2016).

MIL: Asian context

Although media education is still relatively young across Asian countries, digital media use is quite high thereby creating problems as students spend most of their leisure time watching television and playing computer games and making the teachers resort to a defensive and protectionist approach to media education (Cheung, 2009) instead of critical autonomy and empowerment approaches. The Global Digital Reports 2021 surface that the Philippines remains to be number one as regards hours spent on the internet despite the country's low internet connection speeds (Kemp, 2021). The report also reveals the relatively high media

consumption of Indonesia, Malaysia, and Thailand. This becomes problematic as media education should develop and mature over time, especially with the noticeable high rates of the countries' media consumption. Moreover, Western approaches have heavily influenced media education in Asian societies. Japan started in 1992 with the Japanese-version of Ontario's Ministry of Education book, "Media Literacy" (Shibata, 2002). Canadian pioneer, Barry Duncan, has also been a prominent media education figure in Taiwan, Hong Kong and South Korea, while United Kingdom's David Buckingham supervised Asian post graduate students (Cheung, 2009). Media education in Hong Kong (Cheung & Chau, 2017), and Singapore (Weninger et al., 2017) is integrated in their English curriculum. Some Asian countries underwent the same initial stage of protectionism in implementing media education.

MIL: The Philippine context

While most western countries have a fully developed media education programs, Asian societies have yet to develop and mature. In the Philippines, media education is reflected in the lone MIL subject that started only in 2016, through the enactment of Republic Act No. 10533 that added senior high into the educational system. Hence, media education in the country is very much in its infancy. The importance of MIL skills go beyond merely equipping people with skills in the consumption and production of media texts to empowering them to express themselves, their societal awareness (Lim & Nekmat, 2008), as well as their development in a democratic society (Jolls & Johnsen, 2017). In the *Hunger Games* trilogy, the protagonist-narrator, Katniss Everdeen, overwhelmingly resonates among young people today because of her high levels of MIL skills – surviving the games, influencing oppressed people using her media spotlight, outsmarting the game developers, and sparking a revolution to topple an oppressive government – all because of her critical thinking coupled with her skillful use and evaluation of media texts (Latham & Hollister, 2014). Media-and-information literate students have a more positive, but nuanced perspectives on journalism, and value decision-making about media messages (Hobbs et al., 2013; McDougall et al., 2015) that enable them to thrive in a rapidly-evolving mediascape (Bhatia, 2016). However, the Partnership for 21st Century Skills (2016) report that the knowledge and skills students learn in school fall far short of the expectations for critical thinking, problem

solving, communication, and collaboration (Kinzer, 2010). Yuan (2015) also found a striking disconnect between the students' meaning making through digital texts at home and their digital literacy practices within their school. Voss (2011) explains that students today are like Midas surrounded by gold, but are not skillful enough at converting their ICT exposure into a functional "currency." Curriculum development has always been beset by challenges not only in terms of new perspectives and ICT development, but also along content and pedagogy (Alagaran, 2015). Kellner and Share (2005) suggest that in order for education to remain relevant, "engaged teachers must expand the concept of literacy and develop new curricula and pedagogies" (p. 369-370). Hobbs (2011) likewise highlight media education's focus on the critical analysis of media texts, which is aptly interlinked with the primary goal of schools in helping the students acquire various MIL skills. These competencies are instrumental to the learning transformation of the ever-changing digital environment (Thoman & Jolls, 2004), which are crucial to the development of a knowledge society (Lee, 2012).

Problem statement

Since teachers are primary agents of change (UNESCO 2011, 2013) and play a key role in this 21st century learning environment (Gretter & Yadav, 2016), they need to ensure that their curriculum develops the much-needed MIL competencies, so their students can take full advantage of knowledge societies thereby becoming empowered global citizens (UNESCO, 2013). Morano (2014) stressed the glaring lack of research to guide teachers in the training of students equipped with 21st century competencies. Inan and Temur's survey (2012) of prospective Turkish teachers found that they had a low level of interest in and reaction to media texts. Helping prospective teachers develop MIL competencies is critical if they are to transmit these skills to tomorrow's workers (Felini, 2014). In the Philippines context, empowering prospective teachers can only be possible through MIL integration in the language majors of the Bachelor of Secondary Education, because although students take courses in Technology for Teaching and Learning in the new K-12 curriculum (CMO No. 75 s. 2017), these courses lack a cohesive and holistic approach to MIL coverage. In the higher education context in the Philippines, critics also lament the unbalanced BA Communication curriculum, which is concentrated on developing good

communicators and media producers, disregarding the fact that the students are also media consumers (Alagaran, 2012). CMO Number 35 series of 2017 notes that numerous classes on media production and interpersonal communication exist in the BA Communication program, but there is no single subject or course that includes MIL in any of its course descriptions. Alagaran (2015) further expresses the seeming lack of attention given to the consumer aspects of Communication students, as their curriculum only focuses on their being producers. With the dawn of prosumership, Communication students need to be critical and discriminating users of media texts to facilitate their balanced formation as empowered media and communication practitioners in the future (Alagaran, 2015). He suggests a revisit of the Communication curriculum to make it more responsive to the Post-2015 development agenda and to ensure that the future media practitioners possess balanced MIL competencies.

A coherent curriculum is the first step in the introduction of relevant MIL programs in K-12 education (Koltay, 2011; Wilson, 2012). But in the Philippines, because MIL is only included in Grade 11 or 12, there is an overwhelming need for it to be implemented as stand-alone course or through integration in Higher Education Institutions (HEIs). Integration in Language and Communication programs makes sense because the origins of media education lie in English education, where a focus on media texts is very much central to curriculum and instruction (Buckingham et al., 2005; Cheung & Chau, 2017). With the rapidly changing ICT and media landscapes, the need to acquire critical global MIL competencies are non-negotiable. Though there are challenges in the implementation of an effective media education program, the greater concern, especially in the Philippines where MIL has recently been implemented, is the notable need to ensure that it is integrated in the Language and Communication programs of HEIs. Hence, this study explores MIL in an Asian context, specifically the level of MIL competencies of graduating Language and Communication students in the Philippines, as measured in the adapted UNESCO MIL Competency Matrix (Tier 2). This research specifically aims to answer this question: What are the self-reported competency levels of education and communication students in relation to UNESCO's (2013) MIL Components of access, analyze, and create?

This study will contribute to the academic literature by (1) recognizing the need to develop global MIL

competencies needed in today's knowledge society, (2) addressing UNESCO's call for professionals as principal agents of change, as instruments to the cultivation of media and information literate citizens, as well as the identification of MIL strengths and weaknesses so that appropriate policies would be developed (3) encouraging CHED to make some policy changes on MIL, and (4) integrating future changes in the Language and Communication Programs.

METHODS

This research employed descriptive research to describe systematically and accurately the characteristics of a given population or area of interest, provide an accurate portrayal of characteristics of a particular individual, situation or group; discover relationships between or among selected variables; and answer questions based on the ongoing events (Dulock, 1993, as cited in Association of Pediatric Hematology/Oncology Nurses, 2018). A survey of 137 university students was conducted in the Philippines in the largest university north of the capital to learn more about the experiences of the graduating students from the Bachelor of Secondary Education program, including those majoring in English ($n = 21$) and Filipino ($n = 5$), as well as students graduating from the Bachelor of Arts in Communication ($n = 111$) during the 2017-2018 academic year. To provide supplementary data, an interview with a UNESCO MIL expert based in the Philippines was also conducted.

Research instruments

The major tool that was utilized is an assessment tool adapted from the MIL Assessment Framework competency matrix (Tier Two) developed by UNESCO in 2013. The matrix is "for assessing competencies at the individual and institutional level" the results of which will enable the country or even the educational sector "to make informed decisions [...] for interventions aimed at the further development of MIL, by fostering an enabling environment and enhancing the competencies of their citizens" (p. 18). The adapted MIL Competency Survey is composed of three MIL components: Access, Evaluate and Create. Each component has four major components; Access has four competencies with 28 performance criteria, Evaluate has four competencies associated with 42 performance criteria, and Create has four competencies connected with 35 performance criteria. Though the UNESCO tool had a total of 113

performance criteria, our adapted tool only had 102 items, as eight of the criteria were combined to create four sets, and five of the criteria were omitted as its applicability in the country's context is repetitive ("Define" and "Recognize" the "need for information and media content" were phrased in the adapted survey as "I recognize my need for information and media content"; "Retrieves different types of information" and "Selects, organizes and holds onto the retrieved information and media content using appropriate technologies and tools" were phrased as "I select, organize and manage retrieved information and media content using appropriate technologies and tools."; "Assumes that retrieved information and media content could be useful in the future" and "Applies basic requirements of holding information and media content" were phrased as "I recognize that retrieved information and media content could be useful in the future."; "Examines information and media content gathered, and its sources as well as media and information providers" and "Evaluates information and media content gathered, its sources and media and information providers" were phrased "I evaluate information and media content I gathered, including their sources."), alluded to ("Formulates a general statement/question based on information need into a form of an active statement/question, vocalizes, writes down, types, constructs, expresses using any technique in an explicit and efficient manner" was deleted as it is implied in "Connects and consults with other individual groups, organizations, or levels to formulate a general statement/question" which was phrased as "I connect and consult other individuals, groups, organizations to formulate a general statement/question/solution."; "Determines the availability, costs, time, benefits and applicability of acquiring the needed information and media content, applying the methods and strategies formulated above" was alluding to "Determines the methods and strategies for accessing information and media content" so it was phrased "I determine the method and strategy for accessing information and media content."; "Accesses selected information and media content through a variety of media and other information providers" is also implied in "Explores, determines and situates the place/site where information and media content could be found and located" so it was phrased "I locate the physical and virtual place/cite where information and media could be found.").

The items "Applies basic requirements of holding information and media content" and "Understands the importance of life cycle of information and media

content for evaluation" were not included as its applicability to the country is low and that the respondents' education curriculum does not address in part or in whole the statements identified. These changes were approved by the three language experts who performed a content validity of the adapted tool. UNESCO explicitly states that the "national adaptation of questionnaires is recommended since countries can be at very different stages of development" (p. 72). Furthermore, the tool utilized the three-point Likert scale that UNESCO (2013) proposed for the grading of the various MIL competency levels:

1. Basic – indicates that the "respondent has basic level of knowledge, training, or experience on MIL, but significant improvements are needed for effective application" (p. 60).
2. Intermediate – indicates that "the respondent has a good level of knowledge and skills acquired from practice and training on MIL, but there are gaps in certain areas" (p. 60).
3. Advanced – indicates the "respondent has a very good level of knowledge and skills acquired from practice and training on MIL" (p. 60).

We performed content validity and reliability testing using the Aiken's V Validity Coefficient, the computed validity coefficient was 0.98. This is greater than the threshold of 0.70; hence, the adapted survey questionnaire is assumed to be valid. The reliability testing with 32 BA Communication students from another university also yields "reliable" assessment, as shown on Table 1.

Table 1. *Reliability analysis*

Instrument	Reliability Tool	Reliability Coefficient
Part I – Access	Cronbach's Alpha Coefficient	0.896
Part II – Evaluate	Cronbach's Alpha Coefficient	0.906
Part III – Create	Cronbach's Alpha Coefficient	0.888
Parts I, II & III combined	Cronbach's Alpha Coefficient	0.954

Research procedures

The researcher received permission from officials at the biggest University north of the Philippine capital, including the departments of Professional Education as well as Languages and Communication. This university was selected because their program included both a BA

in Communication and a BS in Education, in addition to having biggest student population because the city where it is located is the “educational capital of the north” (Damian, 2020). After the permission was obtained, details of the research were personally discussed with the student respondents.

Of extreme importance in any study is its adherence to ethical guidelines; hence, the researcher sought to ensure that a systematic and honest approach was undertaken. At the onset, all the respondents were informed that their participation in the study was voluntary and that anonymity will be observed to protect their privacy. After the willing participants were given an orientation to the project and gave their consent, the survey was administered. They were given ample time to complete the questionnaire to ensure that the data gathered were the true representations of their perceived level of MIL. No incentives were given to the participants. To provide support to the data gathered from the respondents, an interview with a UNESCO MIL expert was sought. The researcher first obtained the permission of the expert for a possible sit-down recorded interview through a letter. After the expert

gave his consent, the interview was scheduled. The expert participant was also assured anonymity, despite his being easily identifiable. Also, to avoid bias, the researcher observed bracketing, an operational term which connotes procedures that involve openness and responsiveness to changing one’s perspective through the interview process.

Since the major tool that was utilized is an assessment tool adapted from the UNESCO MIL Competency Matrix (Tier Two) under the MIL Assessment Framework, permission to adapt was sought through UNESCO MIL program specialist, Alton Grizzle. The permission was granted.

Approach to data analysis

Student self-report responses were scored using the three-point Likert scale proposed by UNESCO (2013). It includes the criteria in Table 2. In addition to the aforementioned, an interview with a UNESCO MIL expert was also utilized. The information collected provided supporting data to the results that surfaced from the survey.

Table 2. *Assessment of proficiency levels for grading the various MIL competencies*

Level	Range	Description	Interpretation
1	1.00-1.66	Basic	Basic level of knowledge, training or experience on MIL, but significant improvements are needed for effective application.
2	1.67- 2.33	Intermediate	Good level of knowledge and skills acquired from practice and training on MIL, but there are gaps in certain areas.
3	2.34-3.00	Advanced	Very good level of knowledge and skills acquired from practice and training on MIL.

RESULTS AND DISCUSSION

Overall MIL competency levels

The general results of the MIL Competency Survey among graduating Language and Communication students yielded a general Intermediate level as can be seen in Table 3.

While this may be a good sign, the self-assessment results also mean that the respondents themselves are not so proficient with the said competency as they feel they still have a room for improvement. Since the respondents were born into a digital world, they are comfortable with the use and access of technological devices. The ubiquity of gadgets and other electronic

equipment also add to the easy access of individuals to these. All these provide support as to why the Access domain turned out to be the highest mean, despite all components being Intermediate (Table 3).

Table 3. *General MIL competency levels*

Competencies along the MIL components	Mean	Description
1. Access	2.02	Intermediate
2. Evaluation	2.01	Intermediate
3. Creation	2.02	Intermediate
Overall	2.02	Intermediate

Access. The Access component pertains to the ability of utilizing suitable technologies in order to access,

retrieve and store media texts. Retrieval of which is not only limited to the use of the internet, but also includes information and content from libraries, personal files, museums or from other sources that may be physically or electronically stored.

As can be seen from Table 4, the respondents have an overall intermediate competency level across all the four major competencies.

Table 4. *General competency levels along access*

MIL major competencies on access	Mean	Description
Definition and articulation of a need for media and information	2.08	Intermediate
Search and location of information and media content	1.92	Intermediate
Access to information, media content and information providers	2.13	Intermediate
Retrieval and retention of information and media content	1.96	Intermediate
Overall	2.02	Intermediate

This indicates that they have a “good level of knowledge and skills acquired from practice and training on MIL, but there are gaps in certain areas” (UNESCO Global MIL Assessment Framework, 2013

p. 60). The same table further shows that the respondents obtained the highest mean along the major competency for “access to information, media content and information providers.” The finding suggests that advances in technology have simplified the finding and retrieving of media and information texts. The ubiquity of media also may also contribute to the ease of access that individuals experience.

This result is also supported by the Global Digital 2021 Report (Kemp, 2021) which surfaced the steady growth of internet users around the globe. The same study reports that Filipinos spend the longest time on the internet with an average of 10 hours per day. Among the three MIL components, Access is the foundational step for an individual to move on to the spiral progression of Evaluation, which necessitates critical thinking and analysis, before moving on to the advanced skill of Creation, which involves complex adherence to existing codes, standards, ethics and laws. The ability of one to effectively and appropriately access media content will impact his or her process skills of Evaluation and ethical Creation. The second Access major competency focuses on search skills and identifying the location of information and media content.

Table 5. *Access: Search and Location of Information and Media Content*

Search and location of information and media content	f	Basic		Intermediate		Advanced		Mean	Description
		1	2	3	3				
		%	%	f	%				
a. I use search strategies to find appropriate media and information sources.	28	20.4	83	60.6	26	19.0	1.99	Intermediate	
b. I locate the physical and virtual place/site where information and media content could be found.	30	21.9	77	56.2	30	21.9	2.00	Intermediate	
c. I evaluate the author/producer of information and media content I use.	49	35.8	63	46.0	25	18.2	1.82	Intermediate	
d. I recognize the role of metadata.	84	61.3	48	35.0	5	3.6	1.42	Basic	
e. I prioritize potential information sources by type of information source, date, topic, author, keywords, etc.	25	18.2	85	62.0	27	19.7	2.01	Intermediate	
f. I recognize the diversity of information and media content provided by information providers and media.	13	9.5	85	62.0	39	28.5	2.19	Intermediate	
g. I distinguish formats of information and media resources.	44	32.1	70	51.1	23	16.8	1.85	Intermediate	
h. I recognize the importance and relevance of tools for locating information and media content.	29	21.2	79	57.7	29	21.2	2.00	Intermediate	
i. I recognize the limitations, challenges and possibilities of locating information and media content due to technical, legal, economic, social-cultural, political and other reasons.	26	19.0	83	60.6	28	20.4	2.01	Intermediate	
j. I refine my search strategy, if required.	37	27.0	79	57.7	21	15.3	1.88	Intermediate	
k. I locate information sources, using appropriate tools.	29	21.2	79	57.7	29	21.2	2.00	Intermediate	

Table 5 shows a glaring result in the performance criterion in the item, “I recognize the role of metadata,” with a mean score of 1.42. Respondents assessed themselves as only having a Basic level. This means that they recognize that “significant improvements are needed” (UNESCO Global MIL Assessment Framework, 2013, p. 60) by them.

The term, metadata, was unfamiliar and confusing to the respondents as the respondents directly asked the researcher to clarify the term. Cole (2012) points out that metadata is hard to define as it is commonly described as “data about data” where data may be mistakenly construed as information instead of the raw numbers captured from a specific standard (Brown, 2019). Gilliland (2008) also states that metadata is fuzzy; thus, hard to define. Mayernick and Acker (2018) reveal that the definitions between data and metadata create the confusion. Hence, it can be gathered that since the respondents are not technically adept at understanding ICT terminologies like metadata, the low competency level that they rated themselves may be reflective of the term’s fuzziness. Ofcom (2017) surfaced that adults have an unclear understanding of websites’ use of data and metadata and this obscures their confidence online. Quite clearly, confusion on the definition of a term impacts reader comprehension.

Metadata’s importance cannot be denied; people deal with it on a daily basis as both traditional and new media are metadata-laden. Metadata can be found in a book’s cover page, table of contents, and index. It can be found in product packaging labels that indicate its contents, weight, expiration dates. On any Twitter account, there are 144 metadata fields such as the tweeter’s screen name, user identification, Uniform Resource Locator (URL), geolocation, favorites, and followers, among others. Metadata is mined by marketing researchers to target their markets and used by investigative reporters and fact-checkers to validate sources and corroborate information they gather, but it can also be utilized by data miners for unwarranted surveillance thereby threatening people’s privacy, cybersecurity and democracy. Because information technology and metadata are inseparable, understanding metadata is necessary for one to be a truly empowered digital citizen and to be more circumspect in the roles and impacts that metadata play in our online and offline lives.

Evaluate. The Evaluation component of MIL denotes the core skills of an individual in appraising, assessing and understanding of media texts critically and

competently. The respondents assessed themselves with Intermediate level in all its four major competencies.

Table 6 shows results which indicate that living in this media-saturated world necessitates knowing how to read media texts in relation to genres, forms and purposes. For example, looking at a magazine advertisement for weight loss, one may be able to see a compelling statement like “Lose 10 pounds in 3 days” with an accompanying before-and-after photo of a model. If the person has knowledge of persuasion techniques and photo manipulation, s/he will be able to detect the use of glittering generalities or photoshopping inconsistencies which will stop him/her from purchasing the product. Media education’s goal is to develop students who are not only critical, but are also reflective thinkers (Wade, 2014) as they must learn to operate beyond knowledge and understanding. Students must be able to interpret media texts and make informed decisions and judgment, reflective of skilful MIL prosumers (UNESCO, 2013).

Hence, though students self-evaluation of their Evaluation competency level is intermediate, it can still be upgraded. UNESCO (2013) highlights that the MIL competencies exist in a continuum which can be developed and improved over time.

Table 6. *General competency levels, evaluation*

MIL Major competencies on evaluation	Mean	Description
Understanding of information and media	2.28	Intermediate
Assessment of information and media content, and media and information providers	1.92	Intermediate
Evaluation of information and media content, and media and information providers	1.95	Intermediate
Organization of information and media content, and media and information providers	1.91	Intermediate
Overall	2.01	Intermediate

Table 7 shows the results for evaluation of information and media content and providers. It is quite interesting that Table 7 shows that the lowest self-reported competency is for the statement, “I create arguments for the drawn conclusions,” with a mean score of 1.66. This finding suggests that respondents recognize their need to improve on their case building and conclusion-making. The results are corroborated by

the UNESCO MIL expert who said that MIL competencies allow prosumers to be engaged and empowered for them to make informed decisions based on their critical discernment of media texts. He added that making informed choices boosts the country's growth in economy, politics and socio-cultural aspects. Partnership for 21st Century Skills (2016) indeed

emphasize the glaring mismatch between the knowledge and skills students learn from the academe, and the expected knowledge and skills essential to the digital environment. Yuan (2015) also surfaces the salient disconnect between the students' meaning-making of media texts at home, and their MIL practices within their school curricula.

Table 7. *Evaluation of information and media content and providers*

Evaluation of information and media content, and media and information providers	Basic 1		Intermediate 2		Advanced 3		Mean	Description
	f	%	f	%	f	%		
a. I recognize the limitations and subjectivity of evaluation.	27	19.7	90	65.7	20	14.6	1.95	Intermediate
b. I identify and synthesize related needs/ issues and ask additional questions.	33	24.1	95	69.3	9	6.6	1.82	Intermediate
c. I evaluate information and media content I gathered, including their sources.	23	16.8	78	56.9	36	26.3	2.09	Intermediate
d. I compare information from different media and information sources.	14	10.2	71	51.8	52	38.0	2.28	Intermediate
e. I draw conclusions from information and media content gathered, using various techniques, and I make judgment thereafter	32	23.4	81	59.1	24	17.5	1.94	Intermediate
f. I create arguments for the drawn conclusions.	61	44.5	61	44.5	15	10.9	1.66	Basic

Table 8. *Organization of information and media content and providers*

Organization of information and media content, and media and information providers	Basic 1		Intermediate 2		Advanced 3		Mean	Description
	f	%	f	%	f	%		
a. I outline/write my own notes and I summarize.	31	22.6	58	42.3	48	35.0	2.12	Intermediate
b. I revise, refine, frame and narrow down my problem/issue/question.	34	24.8	69	50.4	34	24.8	2.00	Intermediate
c. I group and organize information and media content.	25	18.2	77	56.2	35	25.5	2.07	Intermediate
d. I demonstrate the importance of indexing selected information and media content through indexation.	69	50.4	58	42.3	10	7.3	1.57	Basic
e. I use tools and format for organization of information and media content.	41	29.9	80	58.4	16	11.7	1.82	Intermediate
f. I compile relevant information and media content based on evaluation for future use.	34	24.8	69	50.4	34	24.8	2.00	Intermediate
g. I rewrite information and media content from one format to another.	54	39.4	62	45.3	21	15.3	1.76	Intermediate
h. I synthesize information and media content from several formats such as print, audio, video.	33	24.1	75	54.7	29	21.2	1.97	Intermediate

Table 8 presents results for items related to the organization of information and media content and providers. Respondents self-assessed themselves with a

Basic competency for the item, "I demonstrate the importance of indexing selected information and media content through indexation," which received a mean

score of 1.57. This finding suggests that significant improvements are needed by the respondents in terms of knowledge and skills alongside indexation, which is the process of capturing relevant metadata associated with one's records (Park & Brenza, 2015).

Closely related to indexing is metadata, which also surfaced to be of basic competency level among the respondents. With metadata considered by scholars as a fuzzy concept (Cole, 2012; Gilliland, 2008; Mayernick & Acker, 2018), it is not surprising that indexing is also confusing among the respondents because of its connection to metadata. PC Mag (2018) emphasize that indexing characteristics are so complex as content is organized using indexing tags and metadata that link these to other content types.

Hence, the importance of indexing among the respondents is obscured by its connections with tagging systems and metadata. Jolls and Johnsen (2018) suggest that MIL process skills (e.g. understanding metadata roles and indexation) are essential for citizens to efficiently manage information, wisely consume and responsibly produce media texts.

Create. Creation is defined as the ability to master media production know-how, new knowledge and effectively communicate with others in an ethical and effective manner (UNESCO, 2013). This also involves the ability to display adherence to intellectual property as well as the participation and monitoring of democratic processes. Table 9 reveals that respondents have an Intermediate competency level in all four major competencies.

Table 9. *General competency levels, creation*

MIL Major competencies on create	Mean	Description
Creation of knowledge and creative expression	1.96	Intermediate
Communication of information, media content and knowledge in an ethical and effective manner	2.11	Intermediate
Participation in societal-public activities as active citizen	2.01	Intermediate
Monitoring influence of information, media content, knowledge production and use	1.99	Intermediate
Overall	2.02	Intermediate

Since MIL demands the ethical use of ICT, as well as ethical and democratic participation in intercultural dialogues (Wilson, 2012), an MIL process framework to

guide content creators to produce materials within the legal and moral bounds, is crucial.

Alagaran's Explore, Engage, Empower model (2015) provides a general process framework of understanding, utilizing and practicing MIL; it is a guide to media text creators to produce materials within moral and legal bounds. UNESCO (2010) outlines that MIL's ultimate goal is to empower individuals to make their own decisions, be more engaged in both civic and economic life, and to move beyond knowledge broker dependence to becoming knowledge builders – all within the confines of international standards and ethics of knowledge creation. Consequently, the Philippines Commission on Higher Education (CHED) has identified MIL as a national priority under the Competence category as mandated in CMO 3 series of 2016. This highlights the need for Language and Communication students to be equipped with advanced MIL competencies for them to be critical, ethical and responsible prosumers of media texts.

While this study has identified that university graduates believe themselves to be at a general intermediate level of MIL competency, it is important to recognize the limitations of self-reported assessments. Since the survey entails self-reporting, respondents assessed their own competencies to the degree by which they think they are able to perform each criteria (Hargittai, 2009). Lavrakas (2008) notes that respondents may not be very willing to comply even if survey researchers attempt to gather accurate and truthful accounts; hence, their tendency is to misreport consciously or subconsciously for self-concept protection, social desirability issues, or embarrassment and fear that such disclosure may bring them harm. This misreporting risk (Hargittai, 2005) lead scholars to not properly estimate correlates (Ansolabehere & Hersh, 2012) and appropriately make their conclusions (Lavrakas, 2008).

Moreover, we also have to consider that an intermediate MIL competency level vary across regions and communities (Catts, 2010) and that what constitutes a satisfactory level will change over time as changes in technological infrastructure may require new MIL competencies (UNESCO, 2010).

As regards to the new K-12 curriculum where senior high school students take MIL as a stand-alone subject, the UNESCO MIL expert revealed that the Department of Education admits to have “committed a blunder in the MIL curriculum” as its emphasis is on educational technology.

Table 10. *Creation of knowledge and creative expression*

Organization of information and media content, and media and information providers	Basic		Intermediate		Advanced		Mean	Description
	1		2		3			
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%		
a. I recognize that existing info. & media content could be combined with original thought to produce new info. & knowledge.	18	13.1	83	60.6	36	26.3	2.13	Intermediate
b. I organize the information & media content gathered, in a manner that supports the purposes and format of new info. media content or knowledge.	29	21.2	86	62.8	22	16.1	1.95	Intermediate
c. I recognize the importance of socio-cultural aspects of the target audience, such as gender, race, age, etc.	15	10.9	58	42.6	64	46.7	2.36	Advanced
d. I present info. & media content gathered using tools formats into a new context.	32	23.4	89	65.0	16	11.7	1.88	Intermediate
e. I reflect and, if needed, revise the creation process.	32	23.4	74	54.0	31	22.6	1.99	Intermediate
f. I apply international standards, requirements, recommendations for new knowledge creation in an ethical manner.	67	48.9	54	39.4	16	11.7	1.63	Basic
g. I recognize the importance of info. accessibility standards & recommendations for reaching out to target audience.	25	18.2	84	61.3	28	20.4	2.02	Intermediate
h. I customize information & media content, applying info accessibility standards & recommendations.	45	32.8	83	60.6	9	6.6	1.74	Intermediate
i. I use various tools for the creation & aesthetic presentation of new know-ledge in various formats.	49	35.8	65	47.4	23	16.8	1.81	Intermediate
j. I recognize that new knowledge may have various far-reaching purposes & consequences.	26	19.0	72	52.6	39	28.5	2.09	Intermediate

Though part of MIL is teaching using media, the Consortium for Media Literacy (2011) cautions that “media literacy is not teaching with media, it’s teaching about media” (p.1). Media education is engaging the students in an empowerment spiral of awareness, analysis, reflection and action – as students themselves can become significant sources of insight and knowledge (Consortium for Media Literacy, 2011).

CONCLUSION

This study has provided a portrait of the MIL competency levels of a small sample of Language and Communication students in the Philippines at a single point in time. It also offered a glimpse of MIL in the country by considering both institutional and individual perspectives. Though the study did not present a nationwide survey, it does provide pertinent data regarding respondents’ access, evaluation and creation

of media texts in this age of prosumership. In a country where MIL has just been recently instigated, the results of this study may be utilized to enhance existing MIL programs or serve as a springboard for the integration of MIL into the college curriculum, especially for the Language and Communication programs who would greatly impact tomorrow’s teachers and communication professionals. With the ubiquity of media and speed of information, higher education institutions have a moral, civic and ethical duty to prepare the workforce of tomorrow and equip them with the necessary set of competencies that lead them to become empowered digital citizens actively operating in a democratic society. While MIL is not a new concept, concerted efforts must be made to ensure that this composite set of twenty-first century competencies driven by technology will enable students and teachers alike to critically engage with the converging modes of media and information. Since media and information change over

time, it may be worthy to adapt or develop a MIL competency survey that will cater to the changing times. It will also be interesting to make a comparative analysis of the competency levels of the old-curriculum graduates to that of the K to 12 curriculum. Exploring the lived experiences of Language and Communication students, may also be a further study.

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