

A Study of Factors and Indicators of Media Literacy for Undergraduate Students

Kattakamon Pislai-Ngam¹,
Sirirat Petsangsri²,
and Krissana Kiddee³

Faculty of Industrial Education and Technology,
King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand

¹kattakamonp@gmail.com

²sirirat.p@kmitl.ac.th

³kiddee2410@gmail.com

Received: 7/10/2019

Accepted: 16/10/2019

Abstract - The purpose of this research was to study factors and indicators of media literacy for undergraduate students in Valaya Alongkorn Rajabhat University. The samples were 469 students selected by multi-stage random sampling technique who are current study in general education course, first semester academic year 2019. The research instrument was a questionnaire with 49 question items using Likert scale. The data collected by five rating scale which was develop in this research, content validity, discriminating power and reliability were applied for data analysis. The result shown that the factors and indicators of media literacy for undergraduate students consists of 6 factors and 20 indicators as follows: indicators including: 1) Access with 3 indicators, 2) Analysis with 4 indicators, 3) Use with 3 indicators, 4) Evaluation with 3 indicators, 5) Creation with 4 indicators, and 6) Reflection with 3 indicators.

Keywords - Factors, Indicators, Media Literacy

I. INTRODUCTION

Technological advancement affects the media to play an essential role in people's routine life and it is like two-edged sword that has both benefits and drawbacks to users. Ministry of Information Technology and Communication, Thailand [8] mentions the context of Thailand in digital age in a digital

development for economy and society plan associated with utilization of digital technology of people and society that digital technology can uplift quality of life of people in various dimensions such as constructing learning opportunity, increasing income, and accessing public services. The concept of media literacy is universally accepted as UNESCO [14] identifies in the strategy of mass media operations with a principle indicating the uplift of media literacy. Media literacy is ability of "using media knowingly" and "using media with alertness", which is an important skill. It is that we do not believe the contents we read, listen or hear and can think, analyze, doubt and question whether it is real or whether it has hidden target. Media literacy is the concept that Potter [11] with members from different countries paying substantial attention as a result of development of communication technology. It supports educational institutions all over the world to develop learning patterns in order to solve problems, make decisions so that we are not a victim and can separate good media from the bad one.

As mentioned above, the first phase will be to study factors and indicators of media literacy to create a questionnaire and analyse results. It will lead to development of instruction to enhance media literacy for undergraduate students.

II. LITERATURE REVIEW

Literacy is a concept continuously evolved. Initially, the meaning was originated from ability to read and write which links with rights to study of people. Later, the concept and definition of literacy was developed to respond technological, economic, social and political condition that change. UNESCO [14] stated that “Media Literacy” means not to believe contents heard, seen, listened or passed on but to analyze and question like a curious person whether is true, who is an informant, whether there is hidden communication or target or whether the sources are reliable and who gains or loses benefits. It consists of 3 processes i.e. media accessing process, process to understand, analyze, interpret, and evaluate media’s contents and process to express creatively with interaction with media. Harshman [5] examined the development of global citizenship by using skills of media literacy with discretion divided into 2 phases including: 1) surveying media literacy skill and 2) developing characteristics of learning that promote citizenship of media literacy. The findings reveal that teachers in universities had media literacy at good level. The development was called as 6C Model including context, connection, content, commerce, community and cost. Karaduman [13] investigated media literacy of grade-11 students in England dividing into 2 groups i.e. the group taking media literacy course and the group taking normal course with the measurement improved from media literacy skill evaluation form of Quin by using following compositions 1) accessing, 2) understanding media’s meaning, 3) analyzing, 4) brainstorming, 5) participating, and 6) evaluating. The study result indicated that the group with media literacy course could identify objectives of media to media receivers and they had skills to access media safely, knew how to analyze strengths of media, analyze similarities and differences of contents, knew how to share stories each other and publish works from experience of media literacy from creative learning [14].

UNESCO [14] mentioned the media literacy that media literacy should be separated as 3 main factors including: 1) ability to access media and 2) understanding, analyzing, interpreting and evaluating media’s contents. Boonnak [6] examined the students’s opinion toward information exposure behavior through social media was highly positive while the opinions on media literacy and self-awareness were at a moderate level. The factors of media literacy could not predict information exposure behavior through social media while the factors of self-awareness could predict information exposure behavior through social media. Pasitwisate [7] examined opinion of accepting media and opinions of early teenagers towards media literacy. The findings revealed that the adolescents with different sex, age, accommodation, frequency of media acceptance and time of media acceptance had distinct opinions on media literacy. Nupairoj [9] investigated the factors of media literacy of Gen Y in Thailand and found that in Thailand’s context, the factors of media literacy should be in 4 items including: 1) ability to access media, 2) understanding, analyzing and interpreting media contents, 3) creative expression, and 4) conceptual reflection or consideration of self-action whether it affects has results to others in aspects of morality and responsibility. Meksrithongkam [1] studied perspectives of students in mass communication program towards social media literacy by using questions in 4 aspects including media accessing, participation, analysis and evaluation. Yenjabok [10] studied causative models of media literacy of grade-9 students in Bangkok with 2 sets of variables including: 1) factors with direct influence on media literacy of students and 2) factors with indirect influence on media literacy of the students from above related domestic and international research studies, synthesis of documentary study and main factor for further creation of indicators.

III. METHODS

The samples consisting of 469 selected by multi-stage random sampling technique who are current study in general education course, first semester academic year 2019. The researcher determines size of sample cluster according to the concept of Hair et al. [3] presenting at least 10 samples: parameter in analyze confirmative factors with 20 parameters.

The research instrument using a five Likert rating scale synthesized from the study of theories and literature review that relate to the research. After that the evaluation by five experts will be used to find index of Item-Objective Congruence: IOC and select only items with IOC more than 0.5 The 49 items of question are try-out with 30 students. After that, reliability of the instrument was examined by finding Alpha Coefficient of Cronbach with reliability.

The data were then analyze and the result of the research study were summarized using mean (\bar{x}) and standard deviation (S.D.) the criterion to determine the weight of evaluation is using a five Likert rating scale.

IV. RESULTS

The study of factors and indicators of media literacy for undergraduate students was summarized by objectives as follows.

1. The result of studying factors, operational definitions and indicators of media literacy for undergraduate students could be summarized as 6 factors, 20 indicators including factor 1: Access with 3 indicators, factor 2: Analysis with 4 indicators, factor 3: Use with 3 indicators, factor 4: Evaluation with 3 indicators, factor 5: Creation with 4 indicators, and factor 6: Reflection with 3 indicators in following details.

Factor 1: Access means ability of students to realize that they need to use information by determining scopes of information contents, accessing media effectively in dimensions of gender, language, time, technology and

expense and accessing media correctly, safely and virtuously with following indicators.

Indicator 1.1 specifying scope and selecting methods for searching.

Indicator 1.2 accessing needed information effectively in dimensions of gender, language. Time, expense and technology.

Indicator 1.3 accessing information correctly, safely and virtuously.

Factor 2: Analysis means ability of students to identify sources of who creates contents of the media, understand objectives of media to target group, interpret meaning of media by separating facts and opinions, identify techniques to draw attention, analyze contents of media hiding influence on beliefs and behaviors reasonably with following indicators.

Indicator 2.1 identify sources of who creates media's contents, identify media factor consisting of media brand, media objectives and do interpretation.

Indicator 2.2 interpret media's meaning by separating facts and opinions, techniques to draw attention.

Indicator 2.3 techniques of media to draw attention.

Indicator 2.4 analyzing contents of media hiding influence on beliefs and behaviour reasonably.

Factor 3: Use means ability of students to select media suitably with objectives and use media, review media and publish media discretionarily, correctly and safely, and use media by recognizing etiquettes, personal rights, copyrights and considering potential impacts on themselves, others and society with following indicators.

Indicator 3.1 selecting suitable media with desired purpose.

Indicator 3.2 selecting media, reviewing and publishing media discretionarily, correctly

and safely.

Indicator 3.3 recognizing etiquette, personal rights, copyrights, domestic and universal laws and moral codes.

Factor 4: Evaluation means ability of students to judge quality of media through basic analysis process and to make value judgment from credibility of media's content, media providers, modernity and can decide on suitability of media whether it is righteous and moral.

Indicator 4.1 judgement of media quality through basic analysis process.

Indicator 4.2 judgment of media value from credibility of its contents, media provider, modernity.

Indicator 4.3 judgment of media suitability whether it is legal and righteous.

Factor 5: Creation means ability of students to integrate exiting knowledge and the new one effectively and specify objectives of media creation properly, plan, design, develop, and create media with varieties of gender, age, language, and culture with using in daily life. They can present and publish media through different channels appropriately by recognizing righteousness according to moral code.

Indicator 5.1 integrating existing knowledge with the new one effectively.

Indicator 5.2 determining objectives for proper media creation.

Indicator 5.3 planning, designing, developing and creating media with variety of gender, age, language, and culture with different techniques for learning.

Indicator 5.4 presenting and publishing media through different channels appropriately by recognizing righteousness according to moral code.

Factor 6: Reflection means ability of students to reflect concepts about media with

discretion and reflect thoughts regarding media from existing experience to compare, transmit and share any matters to have new experience. They can use information from media to reflect thoughts, solve problems and apply in their routine life.

Indicator 6.1 reflecting about media with discretion.

Indicator 6.2 reflecting about media from existing experience to compare and share any matters to have new experience.

Indicator 6.3 using information from media to reflect thoughts, solve problems and apply in daily life.

2. The result of developing and validating the questionnaire concerning indicators of media literacy of undergraduate students.

1) The result of content validity examination by 5 experts considering index of item objective congruence was found that IOC was ranged from 0.70-1.00 in every item that every question had content validity.

2) The result of inspecting power by items between groups including 49 questions from 30 students to find basic statistics including mean, standard deviation, was found that the opinion regarding indicators of media literacy for undergraduate students was generally at high level (Mean = 3.74, S.D = 0.79) when considered by items, the mean score was ranged from 3.50-4.33 with standard deviation from 0.57-1.10. For the result of examining validity, the researcher used data from the experiment to analyse and find reliability of the questionnaire by using Cronbach's Alpha Coefficient with validity at 0.79. The researcher inspected before analyzing components with statistically significant testing of correlation coefficient. The findings revealed that 11 questions including item had extremely low correlation coefficient with other messages and they needed to be removed from the factor's analysis. Therefore, questions to be used for component analysis included 38 items to find Cronbach's Alpha Coefficient with validity at 0.82.

V. CONCLUSIONS

From the study of factors and indicators of media literacy for undergraduate students, after analyzing basic information with mean and standard deviation, was at high level. When considering top five aspects with highest mean, the researcher found that they were question Item 4: you can access media at any time and place with any device (mean = 4.33), Item 26: you can judge contents/formats of media (mean = 4.27), Item 1: you realize that you want to use which media (mean = 4.17), Item 35: you can create media suitably according to the objectives (mean = 4.10) and Item 32: you can evaluate suitability of media if it is legal and righteous (mean = 4.07). After that, data were analyzed to find Cronbach's Alpha Coefficient and validity was 0.82, which was consistent with the study of Paomanacharoen et al. [2] examining the analysis of factors of social media literacy of students in educational institutions under the supervision of Bangkok metropolis, finding that mean of questions about online media literacy was at high level and analyzing 9 factors. Furthermore, the findings were in line with the study of Janchusakul [12] investigating the development of media literacy scale and information for secondary students, and discovering that the scale of media literacy development and information for secondary students included 5 factors, 17 indicators and 51 questions for development of media and information literacy of secondary students.

According to the present study, the researcher would use the discovered factors and indicators to evaluate media literacy of undergraduate students as a guideline for developing instructions and activities in General Education courses to enhance media literacy for undergraduate students.

REFERENCES

(Arranged in the order of citation in the same fashion as the case of Footnotes.)

- [1] Meksrithongkam, B. (2011). Media Literacy: Keeping pace with literacy of age. *Executive Journal*, 31(1), 117-123.
- [2] Paomanacharoen, C. et al. (2018). A factor analysis of social media literacy of undergraduates in autonomous higher education institutions in Bangkok. *The journal of social communication innovation*, 6(2), 8-20.
- [3] Hair, J. et al. (2010). *Multivariate Data Analysis*. New Jersey: Prentice Hall.
- [4] Hobbs, R.N. (2007). Measuring the acquisition of media literacy skills. *Reading Research Quarterly*, 38(3), 330-335.
- [5] Harshman, J. (2017). Developing Globally Minded, Critical Media Literacy Skills. *Social Science Education*, 8(1), 69-92.
- [6] Boonnak, K. (2012). Early Teenagers' opinions on Media Literacy. *Bangkok University Research Conference 2012*. Pathumtani, 3-11.
- [7] Pasitwisate, G. (2018). Media Literacy Literacy, Self - Awareness and Information Exposure Behavior on Social Media. *Journal of Humanities and Social Sciences*, 37(1), 200-213.
- [8] Ministry of Information Technology and Communication, Thailand. (2016). *Media Literacy Skills*. Retrieved from http://mol.go.th/site/file/download/pdf/4_executive_summary.pdf. Accessed 20 August 2019.
- [9] Nupairoj, N.I. (2016). Media Literacy Needs Assessment for Thai Generation Y. *Dhurakij Pundit Communication. Arts Journal*, 9(2), 147-171.
- [10] Yenjabok, P. (2009). *Decoding ideas for media literacy*. Offset Creation.
- [11] Potter, W.J. (2005). *Media Literacy* (3rd Ed.). Tounsond Oaks, CA: Sage.
- [12] Janchusakul, S. (2018). Development of Media and Information Literacy Scale for secondary school students. *Journal of Educational Measurement*, 23(2), 183-198.

- [13] Karaduman, S. (2015). The role of critical media literacy in further development of consciousness of citizenship. Social and Behavioral Sciences Conference, 3039-3043.
- [14] UNESCO. (2013). MIL Digital literacy. Retrieved from <https://iite.unesco.org>. Accessed 22 August 2019.