

A Study of Media Literacy in the 21st Century of Undergraduate Students

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Abstract—This research aimed to study the characteristics of media literacy in the 21st century of undergraduate students. The 230 samples were undergraduate students of Sisaket Rajabhat University, Faculty of Education, who were studying in the second semester of 2017 academic year, derived from simple random sampling. The research instrument was a test of characteristics on media literacy using rating scale with 25 items. The data was statistically analyzed by percentage, mean, and standard deviation.

The research found that most students were male and studying in the first year. The characteristics of media literacy in the 21st century of undergraduate students in 5 approaches was at the level of “much” (\bar{X} = 4.24, S.D. = 0.41). Considering in any approach, the media literacy on skill accessing was at the level of “much” (\bar{X} = 4.37, S.D. = 0.40), the media literacy on skill analyzing was at the level of “much” (\bar{X} = 4.17, S.D. = 0.48), the media literacy on skill evaluating was at the level of “much” (\bar{X} = 4.22, S.D. = 0.41), the media literacy on skill creating was at the level of “much” (\bar{X} = 4.19, S.D. = 0.59), and the media literacy on skill participating was at the level of “much” (\bar{X} =4.23, S.D. = 0.52)

Index Terms—Media literacy, the 21st century skill.

I. INTRODUCTION

The progress of information technology is sharply developed nowadays and this leads to access the media and information. The idea of knowing computer literacy is occurred whereas the information technology was used. The media of analog system such as radio broadcast and television was developed to the age of information superhighway. The digital media was integrated and used widely in social. The development of communicative technology help people to access the information in any part of the world [1]. Any media such a television, newspaper and online media was integrated through online devices for anyone to access information world widely.

Hence, media literacy is very important in the 21st century to help people to perceive, understand and evaluated the media critically and use the essential from the media in social and develop the way of life. In the 21st century, the student should be able to develop themselves for the new technology and information technology and adapt for the 21st century way of life and working situation. The important skill in terms of computing and information technology skill is useful for learning, working and surviving [2].

This skill is essential to have for lifelong learning to

encounter the new and unexpected change efficiently [3]. Media literacy becomes the essential skill in the 21st century for the students to get ready for way of life under the increasingly change of the 21st century.

National Broadcasting and Telecommunication Commission [4] identified that media literacy is the skill or competency of people in using media with conscious and be alert in using it. The use of media with conscious is focused on the ability to interpret, analyze the content of media and response critically with conscious, including the ability to ask how come to media by acquiring the information and access any types of media. The ability to apply media is also mentioned in terms of media literacy. [5] extended the definition of media literacy in many approaches; 1) the ability to access messages that refers to decoding the media and collecting the glossary broadly, 2) the ability to analyze messages that refers to the skill of interpreting the idea, thought, making decision, and reasoning, 3) the ability to evaluate messages that refers to the decision making of relationship and value of the meaning of media to the audience including the prior knowledge, forecasting the coming output or the synopsis in logic, 4) the ability to communicate messages that refers to the skill related to the communication such as the ability to understand the audience and the ability to use the symbol for communication efficiently.

Learning for the 21st Century mentioned the skill for working and life in the 21st century which refereed to the five components of media literacy [6].

- 1) Access Skill – this skill helps people to collect the appropriate and useful information. The skill should be able to apply in understanding the content of media effectively.
- 2) Analyze Skill – this skill helps to check the design of media concerning the content, structure of content, sequence of the content and be able to use the economic, social and political approach to understand the context in media presentation.
- 3) Evaluate Skill – this skill helps to connect the content to the personal experience and make decision to evaluate the accuracy, quality and connection of the media.
- 4) Create Skill – this skill helps people to arrange the idea by using the text, audio and/or picture for the different objective of media presentation effectively. The skill is also applied in the creative communication of technology for the content.
- 5) Participate Skill – this skill helps people to participate or interact with others and lead to success in media presentation.

In brief, the media literacy composes of the following skill; analyzing, media evaluation, creativity, and participation

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with the goal to let the audience perceive the media critically. The audience who has media literacy should have ability to analyze the idea from the reality and be able to make decision on media accurately. The audience should realize the impact on media perception and select the best and essential media and avoid the unwanted media. In addition, the audiences should argue or response to the media by many ways that suits the ethic and basic understanding in social. One of the methods of solving the domination from media is “Media Literacy” for the media consumers [7]. As mentioned, the skill of media literacy is very important among the varieties of media, information and technology. It is very interesting to study the characteristics of media literacy of the students to gain the data or information for designing the instructional media and enhance the media literacy for the students to create the qualified learning society in advanced.

II. RESEARCH OBJECTIVES

To study the qualification on computer literacy in the 21st century of undergraduate students.

III. RESEARCH METHODOLOGY

This survey research on the topic “A Study of the characteristics of media literacy in the 21st century of undergraduate students” was operated as follow:

A. Samples

Samples of this research were 230 undergraduate students of Sisaket Rajabhat University, Faculty of Education, who were studying in the second semester of 2017 academic year, derived from simple random sampling.

B. Research Instruments

A questionnaire on the characteristics of media literacy [8] consisted of 2 parts

Part 1 – the basic information of the samples included sex, level of study, and field of study

Part 2 – the description on characteristics of media literacy using rating scale with 5 level of agreement: (5) most (4) much (3) average (2) little (1) least. The description of the question was divided into 5 approaches; 1) Access Skill 2) Analyze Skill, 3) Evaluate Skill, 4) Create Skill, and 5) Participate Skill. The total questions of questionnaire were 25 items.

C. Data Collection

The researcher collected the data from 5-15 October 2017 by the questionnaire of media literacy from 230 undergraduate students. The data was collected and analyzed for results of research as well.

D. Data Analysis

The data was collected and analyzed statistically as follow:

- 1) The basic information of the samples was analyzed by frequency tally and percentage.
- 2) The opinion of the samples was analyzed by mean (\bar{x}), standard deviation with the criteria as follow:
4.50 – 5.00 refers to the opinion of the students at the level of “most”

3.50 – 4.49 refers to the opinion of the students at the level of “much”

2.50 – 3.49 refers to the opinion of the students at the level of “average”

1.50 – 2.49 refers to the opinion of the students at the level of “little”

1.00 – 1.49 refers to the opinion of the students at the level of “least”

IV. RESEARCH FINDINGS

The survey research on the study of characteristics of media literacy in the 21st century of undergraduate students had the results with the following data analysis as follow:

Section 1 Basic information of the students

The data analysis of 230 undergraduate students were that

TABLE I: PERSONAL INFORMATION OF THE STUDENTS (N = 230)

Personal information	No.	Percentage
1. Sex		
male	125	54.35
female	105	45.65
2. Level of study		
1 st year	68	29.57
2 nd year	45	19.57
3 rd year	61	26.52
4 th year	56	24.34
3. Field of study (Major)		
Kindergarten	18	7.83
Mathematics	28	12.17
Computer Education	27	11.74
Thai	15	6.52
Musical Education	18	7.83
Chinese Language Teaching	20	8.70
Primary Education	24	10.43
English	26	11.30
Social Science	25	10.87
Science	19	8.26
Physical Education	10	4.35

Table I showed the data analysis of personal information. The result was that there were 54.35% of male, and 45.65% of female. Most of the students were studying in the first year (29.57%), the less was third year students at 26.52%, the fourth year students were 24.34% and the second year students were 19.57% respectively. Most of the students were majoring in mathematics at 12.17%, the less was majoring in computer education at 11.74%, English major was at 11.30%, majoring in social science was at 10.87%, majoring in primary education was at 10.43%, majoring in Chinese Language Teaching was at 8.70%, majoring in science was at 8.26%, majoring in kindergarten and musical education was equally at 7.83%, majoring in Thai was at 6.52% and majoring in physical education was at 4.35% respectively.

Section 2 Data analysis on the characteristics of media literacy in the 21st century of undergraduate students by 5 level of rating scale was as follow:

The overview of the characteristics of media literacy in 5 approaches was at the level of “much” ($\bar{x} = 4.24$, S.D. = 0.41) and the item analysis on 5 approaches was as follow:

Table II showed the characteristics of media literacy of the students on the first component; Access Skill found that the overview of opinion was at the level of “much”. ($\bar{x} = 4.37$, S.D. = 0.40) Considering in any item, the most of access skill

concerned on the selection of the students to use the media and develop the way to search information, media from both printed and online media (\bar{x} = 4.48, S.D. = 0.59), the less was that he students can access the information from many types of media not even one sources. The mean was at the level of “much”. (\bar{x} = 4.43, S.D. = 0.66) The students are able to collect data and select types of information related to the expectation and use of information. From many channels and the mean was at the level of “much”. (\bar{x} = 4.39, S.D. = 0.72) The students are able to perceive and understand the content in media, information, and description in the media potentially. /the mean was at the level of “much”. (\bar{x} = 4.30, S.D. = 0.76) The students are able to observe, remember, understand and describe the meaning of words, symbols, and unique features of communication effectively. The mean was at the level of “much” as well. (\bar{x} = 4.26, S.D. = 0.62)

TABLE II: THE DATA ANALYSIS OF MEAN AND STANDARD DEVIATION ON THE FIRST COMPONENT; ACCESS SKILL (N = 230)

Description	\bar{X}	S.D.	Results
1. the students are able to select the media or develop the new method for searching information from any media both printed media and online media.	4.48	0.59	much
2. the students are able to perceive and understand the content, information and description of the media potentially.	4.26	0.62	much
3. the students are able to search information from any types of media unlimitedly.	4.43	0.66	much
4. the students are able to collect data and select variety types of information that related to the information need or intention	4.39	0.72	much
5. the students are able to observe, remember, understand and explain the meaning, symbols and unique feature of communication effectively.	4.30	0.76	much
Total average	4.37	0.40	much

TABLE III: THE ANALYSIS OF MEAN AND STANDARD DEVIATION ON THE SECOND COMPONENT; ANALYZE SKILL (N = 230)

Description	\bar{X}	S.D.	Results
1. the students are effectively able to analyze, distinguish the truth, false, idea, propaganda, persuading from media presentation	4.13	0.69	much
2. the students are effectively able to analyze the pros and cons of the media presentation	4.09	0.60	much
3. After making decision to perceive media, the students are able to review the advantages and disadvantages of media and the impacts from media presentation to individual and others	4.26	0.81	much
4. the students are accurately able to explain the main objective and minor objective of the media and cover the aspects	4.17	0.83	much
5. the students are able to rationally give reason to support the media analysis of oneself	4.22	0.67	much
Total average	4.17	0.48	much

Table III showed the characteristics of media literacy of the students on the second component; Analyze Skill found that the overview of opinion was at the level of “much”.

(\bar{x} = 4.17, S.D. = 0.48) Considering in any item, the most opinion was on after making decision to perceive media, the students are able to review the advantages and disadvantages of media and the impacts from media presentation to individual and others which was at the level of “much” (\bar{x} = 4.26, S.D. = 0.81) The less was that the students are able to

rationally give reason to support the media analysis of oneself which was at the level of “much” (\bar{x} = 4.22, S.D. = 0.67) The next was that the students are accurately able to explain the main objective and minor objective of the media and cover the aspects which was at the level of “much” (\bar{x} = 4.17, S.D. = 0.83) Next, the students are effectively able to analyze, distinguish the truth, false, idea, propaganda, persuading from media presentation which was at the level of “much”. (\bar{x} = 4.13, S.D. = 0.69) And the last, the students are effectively able to analyze the pros and cons of the media presentation which was also at the level of “much”. (\bar{x} = 4.09, S.D. = 0.60)

TABLE IV: THE DATA ANALYSIS OF MEAN AND STANDARD DEVIATION ON THE THIRD COMPONENT; EVALUATE SKILL (N = 230)

Description	\bar{X}	S.D.	Results
1. After perceiving the information from any media, the students are able to make decision to believe or unbelief the information critically.	4.39	0.50	much
2. The students are able to perceive the information from creative and useful media ad intended and reject the information of useless and uncreative information.	4.22	0.67	much
3. The students know and understand the conceal information from any media and make decision to use the information appropriately, accurately, and effectively.	4.26	0.75	much
4. The students use the ethic and democratic aspect to make decision the value of any media.	4.04	0.71	much
5. The students use prior knowledge and experience to make decision the accuracy of media using the principle of moral and democratic aspect.	4.17	0.83	much
Total average	4.22	0.41	much

Table IV showed the characteristics of media literacy of the students on the third component; Evaluate Skill found that the overview of opinion was at the level of “much”.

(\bar{x} = 4.22, S.D. = 0.41) Considering in any item, the most opinion was on after perceiving the information from any media, the students are able to make decision to believe or unbelief the information critically which was at the level of “much”. (\bar{x} = 4.39, S.D. = 0.50) The less was on the students know and understand the conceal information from any media and make decision to use the information appropriately, accurately, and effectively which was at the level of “much”. (\bar{x} = 4.26, S.D. = 0.75) Next, the students are able to perceive the information from creative and useful media ad intended and reject the information of useless and uncreative information which was at the level of “much”. (\bar{x} = 4.22, S.D. = 0.67) The students use prior knowledge and experience to make decision the accuracy of media using the principle of moral and democratic aspect which was at the level of “much”. (\bar{x} = 4.17, S.D. = 0.83) And lastly, The students use the ethic and democratic aspect to make decision the value of any media which also was at the level of “much”. (\bar{x} = 4.04, S.D. = 0.71)

TABLE V: THE RESULTS OF MEAN AND STANDARD DEVIATION OF MEDIA LITERACY ON THE FOURTH COMPONENT; CREATIVE SKILL (N = 230)

Description	\bar{X}	S.D.	Results
1. The students are able to design types of media to present the information, knowledge and their own opinion	4.48	0.59	much

2. The students are able to present information and technology by using the media openly, frankly and be on the basis of moral and ethics.	4.39	0.66	much
3. The students are able to produce media through the process of planning, scriptwriting, surfing information and appropriately design the media according to the media production.	3.96	0.82	much
4. The students are able to correct and diffuse effectively the information from any types of media.	4.09	0.95	much
5. The students are able to effectively discuss, suggest idea or criticize the information, value, opinion, fact, motivation, propaganda and overrated suggestion through the media or conceal with media.	4.04	0.88	much
Total average	4.19	0.59	much

Table V showed the characteristics of media literacy of the students on the fourth component; Creative Skill found that the overview of opinion was at the level of “much”.

(\bar{x} = 4.19, S.D. = 0.59) Considering in any item, the most opinion was on the students are able to design types of media to present the information, knowledge and their own opinion which was at the level of “much”. (\bar{x} = 4.48, S.D. = 0.59) The less was on the students are able to present information and technology by using the media openly, frankly and be on the basis of moral and ethics which was at the level of “much”. (\bar{x} = 4.39, S.D. = 0.66) The students are able to correct and diffuse effectively the information from any types of media which was at the level of “much”. (\bar{x} = 4.09, S.D. = 0.95) The students are able to effectively discuss, suggest idea or criticize the information, value, opinion, fact, motivation, propaganda and overrated suggestion through the media or conceal with media which was at the level of “much”. (\bar{x} = 4.04, S.D. = 0.88) And lastly, the students are able to produce media through the process of planning, scriptwriting, surfing information and appropriately design the media according to the media production which was at the level of “much”. (\bar{x} = 3.96, S.D. = 0.82)

TABLE VI: THE RESULTS OF MEAN AND STANDARD DEVIATION OF MEDIA LITERACY ON THE FIFTH COMPONENT; PARTICIPATE SKILL (N = 230)

Description	\bar{X}	S.D.	Results
1. The students participate in criticizing the information and discuss many aspects of information in media correctly and usefully.	4.13	0.69	much
2. The students participate in team working for media production and create or apply the media information correctly and useful for social.	4.35	0.65	much
3. The students interact with others to criticize and give opinion openly on a basis of moral and ethics.	4.00	0.80	much
4. The students respect the right and freedom of others in giving opinion through many types of media.	4.17	0.72	much
5. The students give chances for others to criticize, give opinion, cooperate and use the advantages of media appropriately.	4.52	0.67	most
Total average	4.23	0.52	much

Table VI showed the characteristics of media literacy of the

students on the fifth component; Participate Skill found that the overview of opinion was at the level of “much” (\bar{x} = 4.23, S.D. = 0.52) Considering in any item, the most opinion was on the students give chances for others to criticize, give opinion, cooperate and use the advantages of media appropriately. which was at the level of “much”. (\bar{x} = 4.52, S.D. = 0.67) The less was on the students participate in team working for media production and create or apply the media information correctly and useful for social which was at the level of “much”. (\bar{x} = 4.35, S.D. = 0.65) The students respect the right and freedom of others in giving opinion through many types of media which was at the level of “much”. (\bar{x} = 4.17, S.D. = 0.72) The students participate in criticizing the information and discuss many aspects of information in media correctly and usefully which was at the level of “much”. (\bar{x} = 4.13, S.D. = 0.69) And lastly, the students interact with others to criticize and give opinion openly on a basis of moral and ethics which was also at the level of “much”. (\bar{x} = 4.00, S.D. = 0.80).

V. RESEARCH DISCUSSION

The results on studying the characteristics of media literacy in the 21st century of undergraduate students found that overview of characteristics of media literacy in the 21st century of undergraduate students on 5 approaches was at the level of “much” (\bar{x} = 4.24, S.D. = 0.41) And considering in any approach, the fifth component; access skill, the characteristics of media literacy in the 21st century of undergraduate students was at the level of “much”. (\bar{x} = 4.37, S.D. = 0.40) There consists of the students are able to select the media or develop the new method for searching information from any media both printed media and online media. The less was the students are able to search information from any types of media unlimitedly. Following by the students are able to collect data and select variety types of information that related to the information need or intention. Next, the students are able to observe, remember, understand and explain the meaning, symbols and unique feature of communication effectively. And finally, the students are able to perceive and understand the content, information and description of the media potentially. These results were harmonized to [9] who studied on “The Media Literacy of Children and Young People” and found the ability to access the information of the students in any types of media or any content and the students also avoid the unwanted media or disadvantage to use. In the group of teenagers, they can also distinguish and make decision to access the information of television media.

The study on second component; analyze skill, found that the characteristics of media literacy in the 21st century of undergraduate students was at the level of “much” (\bar{x} = 4.17, S.D. = 0.48) This component consists of after making decision to perceive media, the students are able to review the advantages and disadvantages of media and the impacts from media presentation to individual and others, following by the students are able to rationally give reason to support the media analysis of oneself, the students are accurately able to explain the main objective and minor objective of the media and cover the aspects, the students are effectively able to

analyze, distinguish the truth, false, idea, propaganda, persuading from media presentation, and the students are effectively able to analyze the pros and cons of the media presentation respectively.

Considering on the third component; evaluate skill, found that the characteristics of media literacy in the 21st century of undergraduate students was at the level of “much” (\bar{x} = 4.22, S.D. = 0.41) After perceiving the information from any media, the students are able to make decision to believe or unbelief the information critically, the students know and understand the conceal information from any media and make decision to use the information appropriately, accurately, and effectively, The students are able to perceive the information from creative and useful media ad intended and reject the information of useless and uncreative information, the students use prior knowledge and experience to make decision the accuracy of media using the principle of moral and democratic aspect, and lastly, the students use the ethic and democratic aspect to make decision the value of any media. The results was harmonized to [10] that studied on Media Literacy: Way of Empowering Media Literacy and found the media literacy education in terms of developing the thinking process or intellectual process to help the audience perceiving knowledge, understanding and gain the skill of media selection, analyzing, evaluating, response, and argue or discuss rationally to the media and know the impact of media to the behavior of the audience. This result was also harmonized to [11] that studied by analyzing the media literacy of undergraduate students in Thailand and found in analyze skill that interpret skill; to analyze professional being, business being of media, interpret the code, symbols, and meaning of media in concrete and abstract, even connotation. Including evaluation, judgment which referred to the level to make decision on how mass related to business power and interpreted the meaning of media according to the ideal of media production and social context and culture.

On the fourth component; create skill, the overview of characteristics of media literacy in the 21st century of undergraduate students was at the level of “much”. (\bar{x} = 4.19, S.D. = 0.59) This approach consisted of the students are able to design types of media to present the information, knowledge and their own opinion, the students are able to present information and technology by using the media openly, frankly and be on the basis of moral and ethics, the students are able to correct and diffuse effectively the information from any types of media, the students are able to effectively discuss, suggest idea or criticize the information, value, opinion, fact, motivation, propaganda and overrated suggestion through the media or conceal with media, and the students are able to produce media through the process of planning, scriptwriting, surfing information and appropriately design the media according to the media production respectively. The results was harmonized to [12] that mentioned create message in media literacy was not include the creation of media. To understand the rule of media production creatively, the producers should gain the experience in media production. In addition, the characteristics of internet media open all common people to develop and create online media openly.

On the fifth component; participate skill, the overview of

characteristics of media literacy in the 21st century of undergraduate students was at the level of “much”. (\bar{x} = 4.23, S.D. = 0.52) This approach consisted of the students give chances for others to criticize, give opinion, cooperate and use the advantages of media appropriately, the students participate in team working for media production and create or apply the media information correctly and useful for social, the students respect the right and freedom of others in giving opinion through many types of media, the students participate in criticizing the information and discuss many aspects of information in media correctly and usefully, and the students interact with others to criticize and give opinion openly on a basis of moral and ethics respectively. The result was harmonized to [13] who studied a development of media literacy for online media and mentioned one of the components on media literacy. This aspect was how people create the content and diffuse in online media and lead to apply effectively and also be responsible to social as well.

VI. SUGGESTION

A. Suggestion for Further Research

The educational institutes are able to apply the research to develop the media literacy skill for the students of institutes.

To apply the research findings for instructional management in related courses to enhance media literacy for the students.

B. Suggestion for the further research

The study on media literacy of the students in other level in educational system should be considered.

The study on curriculum and instructional management related to media literacy should be done.

The study of related variables such as educational level, family and bringing up that effect the media literacy should be studied.

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