Description Level of Digital Media Literacy, Learning Style and Learning Achievement in the Subject of Economic Education Research Methodology

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Keywords: Digital media literacy, learning style, learning achievement.

Abstract: Student achievement is the result of student learning that must be achieved after taking the education process. The focus of this study on the description of learning achievement is the final value of the subject of economic education research methodology in which the achievement of these values can influence learning style and the level of digital media literacy. In the course of research methodology students have various ways of learning, with the assumption that most major research methodology is difficult or difficult to understand. Therefore the authors have an initiative to research and make descriptions of the level of digital media literacy and learning styles with student learning achievements, on the premise that technological sophistication now enables students to be able to study independently with the help of technology. This research is descriptive research by using survey method. Based on the results of questionnaire processing, it can be concluded that the level of litersai of digital media of students in the subject of research methodology of economic education is included in good category, meaning that students have the ability to access information and knowledge by available means. Furthermore, the learning style that is owned by the majority of students who follow the research methodology visual learning style is evident/is proved with the results of data processing with the highest percentage is in the visual style. The students' learning achievement described is still not maximized, it is shown by the final test score data which is mostly at the 69-71 value interval, and the value is within the minimum interval.

LIENCE AND TECHNOLOGY PUBLICATIONS

1 INTRODUCTION

Learning achievement is the result of the learning process. In the process of learning achievement can be used as an indicator of the success of the process. Therefore, all people who are pursuing the process of education is always oriented to the achievement of maximum learning achievement.

Learning achievement that became the focus of this research is the achievement in the subject of research methodology of economic education. In the department of economic education this course includes one of the subjects considered as difficult course by students. Every year there are always students who repeat this course. Even for them who are in the semester of the academic year 2016/2017 there are 10% of the old students.

Learning achievement can be defined as the ability of the learners (including students) as a result of learning, implementation is done by assessed or tested. According Sardiman (2002: 46) learning achievement is defined as the real ability of the interaction between the various factors that influence both from within or from outside the individual self in learning.

Furthermore, Winkel in Hamdani (2011; 138) learning achievement is a proof of success that has been achieved by someone. Thus the learning achievement is the maximum result achieved by a person after carrying out the learning efforts.

The process of learning achievement determined or influenced by certain factors, according to Hamdani (2011: 139-146) "the factors that affect learning achievement can be classified into two parts, internal and external factors (external). Internal factors such as intelligence (intelligence), physical factors or physiological factors, attitudes, interests, talents and motivation. While external factors are family circumstances, school situation, community environment".

The carrying capacity of the environment can be seen from various aspects that are so vast, the development of science and technology has produced

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various kinds of ease in the learning process. Much information can be obtained with the ability to access information in various media and use social media in sophisticated gadgets can also be utilized to obtain various information. The ability to access various information from various sources and ways is part of digital media literacy.

Media literacy can be defined as "the ability to access, analyze, evaluate, and create message in variety of form" (Aufderheide&firestone, 1993, p.7). It describes as set of capacities related to media consumption and creation that one can acquire. Digital media literacy extends the traditional understanding of media literacy to include new skills that are required to navigate today's new media environment, and it also involves creative production and instruction on how to evaluate and use information critically (Buckingham, 2003;Jenkins, 2006;Joseph Kahne, Nam-Jin Lee;&J.T Feezell. 2012).

Literacy of digital media is part of the information literacy. Bawden (2001: 2) "Digital literacy or also called digital information literacy is a concept that explains the concept of literacy in the digital age." According to Gilster (1997: 1-2), Digital literacy is described as the ability to understand and use information from various formats. Literacy is not only about the ability to read but read with meaning and understanding.

Digital media literacy is not only a technical capability but must be a critical thinking art which means not all information from digital media can be absorbed sober but must be accompanied by critical evaluation of what is found through the digital media. According to Gilster, in addition to the art of critical thinking, the competence required is to learn how to construct knowledge and build a reliable set of information from several different sources. A person with a digital literacy needs to develop the ability to search and build a strategy in using search engines to find information that matches their information needs.

Renee Hobbs, 2010. Essential Competencies of Digital and Media Literacy;

- 1. ACCESS, Finding and using media and technology tools skilfully and sharing appropriate and relevant information with others.
- 2. ANALYZED & EVALUATE, Comprehending message and using critical thinking to analyze message quality, veracity, credibility, and point of view, while considering potential effect or consequences of message.

- 3. CREATE, Composing or generating content using creativity and confidence in selfexpression, with awareness of purpose, audience, and composition techniques.
- 4. REFLECT, Applying social responsibility and ethical principles to one's own identity and lived experience, communication behaviour and conduct.
- 5. ACT Working individually and collaboratively to share knowledge and solve problems in the family, the workplace and the community, and participating as a member of a community at local, regional, national and international levels.

Students at the present time are highly skilled in using visible gadgets from activities that can be traced in cyberspace on social media, activities that occur in the room with a hotspot is tight. Gadgets and laptops seem to have become the main and important tool to take to campus. It can be said gadgets and laptops become part of the learning style.

Furthermore, internal factors that affect learning achievement is learning style (habit). Every student has different habits in the learning process. Because basically every individual has the ability or different power to obtain the same information or knowledge. It can be called learning style.

According to Nasution (2008: 93) "learning style or student learning style is the way students react and use stimuli-stimuli received in the learning process".

Bobbi DePorter and Mike Hernacki (2000: 110-112) "learning styles are a combination of how one absorbs and then organizes and processes information." Learning styles are not just aspects of facing information, seeing, listening, writing and saying but also the aspect of information processing of secular, analytic, global or left-brain right brain, another aspect is when responding to something in the learning environment (abstractly and concretely absorbed).

According to Drummond (1998: 186) defines learning style as "learning an individual's preferred mode and desired conditions of learning" means learning style is considered as a learning or learning conditions favoured by the learner.

Broadly speaking there are 7 common approaches known as reference frameworks and developed also by different experts with their respective variance. Adi Gunawan (2004: 140) summarizes the seven ways of learning are:

1) Approach based on information processing; Determine different ways of viewing and processing new information. This approach was developed by Kagan, Kolb, Honey and Umford Gregorc, Butler and McCharty.

- Approach based on personality; Determine the different character types. This approach was developed by Myer-Briggs, Lawrence, Keirsey & Bartes, Simon & Byram, Singer-Loomis, Gray-Whellright, Holland and Geering.
- Approach based on sensory modalities; determine the degree of dependence on certain senses. This approach was developed by Bandler & Grinder, and Messick.
- 4) Approach based on environment; determine the different responses to physical, psychological, social and instructional conditions. This approach was developed by Witkin and Eison Canfield.
- 5) Approach based on social interaction; determine the different ways of dealing with others. This approach was developed by Grasha-reichman, Perry, Mann, Furmann-Jacobs and Merill.
- 6) Approach based on intelligence, determining different talents. This approach was developed by Gardner and Handy.
- 7) Approach based on brain region; determine the relative dominance of various parts of the brain, e.g. left brain and right brain. This approach was developed by Sperry, Bogen, Edwards and Herman.

Kind of style of learning according to Canfield (1998) individual learning styles are differentiated in several types of social, independent, applied, and conceptual. Students of social type are those who prefer to study in groups. Independent learners are those who prefer to study independently. Students in applied learning prefer learning by direct practice. The conceptual learner is a learner who likes to learn conceptually.

The learning style is further the result of the research of Professor Ken and Rita Dunn of St. University. John in Jamaica New York and the Neuro-linguistic programming experts Richard Bandler, John Grinder and Michael Grinder, the experts identified three different learning styles and communications:

- 1. Visual, learn through seeing things. We like to see pictures or diagrams. We love performances, show or watch videos.
- 2. Auditory, learning through listening to something, we love listening to audio tapes, lectures, discussions, debates and verbal instructions (instructions).
- 3. Kinaesthetic. Learning through physical activity and direct involvement. We love to handle, move, touch and feel / experience (Rose, Colin & Malcom J. Nichol; 2002; 130-131).

Based on the description can be explained again that the learning achievement will be influenced by the ability of digital media literacy and student learning style itself. Therefore, the authors are interested in researching and describing in detail the relationship between digital media literacy and learning style of economic education students in the subject of economic education research methodology with the learning achievement achieved in the course with the title: "Description of digital media literacy, learning style and Student achievement in Economics education research methodology course".

The formulation of the problem described are:

- 1. What is the competency of digital media literacy of students in the subject of economic education research methodology?.
- How is the student learning style in the subject of economic education research methodology? and;
- 3. How is the student achievement in the subject of economic education research methodology?.

2 METHODS

This research use descriptive approach with survey method. Isaac and Michael (1980) stated that descriptive research aims to describe the phenomena in detail about the relationship between the level of digital media literacy and learning styles with the descriptive approach. Student achievement. The author only describes the data obtained by the survey therefore this research is also called qualitative research.

The research was conducted in Siliwangi university environment as a unit of analysis which is the 3rd grader of Economics education which followed the subject of economics education research methodology in academic year 2016/2017 which amounted to 194 people. Because using survey method, the writer uses random sampling technique with sample size about 50% from population that is counted 97 people.

The data required in this study were collected by using several techniques as follows:

- 1) Questionnaire / quesioner
 - Questionnaire is a technique of collecting data by using a list of statements that have been prepared previously. The contents of the questionnaire contains questions about the level of digital media literacy, and learning styles. In this study the questionnaire will be distributed to the responden is a sixth semester student majoring in economic education that follows the

recovery of economic education research methodology.

Questionnaire used is a closed questionnaire means the author has provided the desired answer so that the respondents just choose.

2) Interview

In the interview, the author held a direct question and answer with respondents to obtain accurate and precise information. In this case the authors will conduct interviews with some students from class representatives who became representative of respondents.

3) Documentation study

Documentation study is used to obtain data of learning achievement, which is the learning achievement in question is the final value in the course of economic education research methodology.

The data has been collected and then analyzed by descriptive analysis and using percentage (%), this analysis aims to provide an overview of the state of research variables.

3 RESULTS AND DISCUSSION

Based on the survey results on the specified sample. Through a questionnaire about the competence of digital media literacy and questionnaires about learning styles it can be obtained research data as follows:

3.1 The competency of digital media literacy of students in the subject of economic education research methodology

The competence of digital media literacy is supported by the ownership of various supporting technologies such as gadgets, computers, laptops, use or ownership of various social media applications, and data quota facilities / internet connections that support both personally and available around the siliwangi university campus.

In measuring the literacy competence of digital media, the writer distributed questionnaires in accordance with the competence of digital media literacy proposed by Renee Hobess ACCESS (including the ability to access various media), ANALYZE & EVALUATE (including the ability to analyze and evaluate information), CREATE (including the ability to use or utilize various media), REFLECT (including responsible use and use of the media, ACT (including the use of various media in order to solve problems encountered such as the problem of lecturing comprehension and work on tasks assigned by lecturers).

To get a clearer picture the writer makes a classification by using interval value, as follows: NJI = (highest-lowest value) / (number of statement criteria)

Information;

NJI = interval to define criteria very well, well, good enough, no

Well, not very good

Highest value = $97 \times 42 \times 5 = 20370$

Lowest value = $97 \times 42 \times 1 = 4074$

Number of statement criteria = 5

Thus the value of interval level for the questionnaire data of the digital media literacy level is;

NJI = (20370-4074) / 5 = 3259

4074 - 7333 category is not very good

7334 - 10593 categories are not good

10594 - 13853 category is good enough

13854 - 17113 good category

17114 - 20373 very good category

Based on these categories, the total score of all respondents as much as 14506 means the level of literacy ability of digital media students in the subject of research methodology of economic education included in the category of good, which means that students basically have the ability to access various information and knowledge with good facilities Personally or the facilities available in the campus environment.

3.2 The student learning style in the subject of economic education research methodology

Learning styles are a combination of how one absorbs and then organizes and processes information. Learning styles can also be interpreted as a way a person in processing information or how a person in acquiring knowledge.

This study discusses three learning styles:

- 1. Visual, learn through seeing things. We like to see pictures or diagrams. We love performances, show or watch videos
- 2. Auditory, learning through listening to something, we love listening to audio tapes, lectures, discussions, debates and verbal instructions (instructions)
- 3. Kinesthetic. Learning through physical activity and direct involvement. We love to handle,

move, touch and feel / experience (Rose, Colin & Malcom J. Nicholl; 2002; 130-131).

The characteristics of someone who has a visual learning style include: (a) remembering what is seen rather than what is heard, (b) likes to scribble things, (c) fast and diligent readers, (d) prefers reading rather than read, (I) better understanding of drawings and charts than written instructions, (j) knowing what to say, but not Thinking the right word, (k) usually not bothered by the commotion, (l) remembering with visual associations.

Furthermore, an auditory-style person displays the following characteristics: (a) more quickly absorbs by listening, (b) moving their lips and uttering the text in a book while reading, (c) enjoy reading aloud and listening, (d) Repeat and imitate the tone, rhythm, and color of the sound, (e) good at speaking and telling stories, (f) speaking in patterned rhythm, (g) remembering what is discussed rather than being seen, (h) speaking, discussing, (J) like music and singing, (k) can not be idle for a long time, (l) loves to do group work.

Whereas, a kinesthetic person has characteristics such as: (a) always physically oriented and multimotion, (b) speaking slowly, (c) likes to use various tools and media, (d) touching people to get their attention, (F) using the finger as a pointer when reading, (i) using a lot of body cues, (j) can not stand by when talking to people, (e) learning through practice, Sitting quietly for long periods, (k) wanting to do everything, (l) love games and sports.

Table 1: tendency of learning styles of students of economic education research methodology

Learning styles	Frequency	Percentage
Visual	42	43,3
Auditory	25	25,8
Kinesthetic	10	10,3
Visual auditory	10	10,3
Visual Kinesthetic	8	8,2
Auditory	2	2,1
Kinesthetic		
amount	97	100

Source; Result of learning style questionnaire data processing

Based on the findings in the table, it can be explained that most or 43.3% of students have a tendency visual learning style, 25.8% of students have auditory learning style, 10.3% of students have kinaesthetic learning style, 10.3% Visual and auditory style tendencies, 8.2% of students of visual and kinaesthetic-style tendencies and 2.1% of students have kinaesthetic auditory learning styles.

With the scores obtained, if it is compared then it can be concluded that most students in the course of research methodology mostly have a visual learning style.

3.3 The student achievement in the subject of economic education research methodology

Winkel's learning achievement in Hamdani (2011: 138) is a testament to the success one has achieved. Thus the learning achievement is the maximum result achieved by a person after carrying out the learning efforts. In this study the learning achievement in question is the final value of the exam in the course of research methodology semester academic year 2016/2017, presented in the table as follows.

Table 2: Distribution of Student Achievement Frequency in Educational Research Methodology Course

Interval	Frequency	Percentage
65-68	24	24,7
69-71	32	33
72-74	8	8,2
75-77	14	14,4
78-80	8	8,2
81-83	2	2,1
84-86	5	5,2
87-89	2	2,1
90-92	2	2,1
amount	97	100

Source; Result of data processing of learning achievement

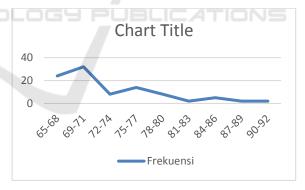


Figure 1: The frequency distribution of student achievement of economic education research methodology

Based on the data table above the final value of the subjects of economic research methodology obtained the highest value of 90 and the lowest value of 65. After presented in the form of frequency distribution table obtained the picture that most values are at intervals 69-71. There are only 2.1% who get great value. With the description above, it describes the achievement of learning in the course of educational research methodology is still not maximal because it is in a very small interval.

4 CONCLUSIONS

Based on the description, it can be concluded that the level of digital media literacy of students in the subjects of economic education research methodology with a total score of 14506 means good category, which means that students basically have the ability to access various information and knowledge with the means they have either individually or the facilities available in the campus. Students' learning style in the subject of research methodology of economic education in the course of research methodology as much as 43.3% of students have a tendency of visual learning style. 25.8% of students have auditory learning styles, 10.3% of students have kinaesthetic learning styles. And there are several combinations of styles that students have such as auditory, kinaesthetic and kinaesthetic auditory. With these findings, the lecturers of economics education research methodology should make an effort to maximize the learning media that can be seen such as drawings, interesting slides and other information displayed neatly and attractively. The learning achievement described is the final grade of the methodology of educational research in economics, there is a high score of 90 and the lowest score 65. However, the acquisition of most students is at intervals 69-71, the numbers that can be said not maximized.

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