Improvement of Digital Literation in Aspects of Creativity Thinking Participants Education Through Project Based Learning in Social Studies

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Abstract. This study aims to improve 21st century skills in digital literacy on the creativity aspects of students' thinking through project based learning. Creativity in thinking at this time is how to do combinations of various factors in human beings, the environment and the process of technological development that is rapidly changing so that it can produce new works that are useful or have social meaning. The method used is the classroom action research model of Kemmis and Taggart, the study was conducted on students of class VII-D of SMP Negeri 30 Bandung consisting of 32 students. Data collection techniques used are observation, interviews and documentation. The theory used is the theory of skills in processing information from several experts which are then modified by researchers according to the needs of the research. The increase in digital literacy in the aspects of students' creativity in thinking through project based learning in social studies learning, based on indicators of increasing digital literacy that each cycle has increased, from the category of enough with a percentage of 46.6% in the first cycle then in the second cycle increased to 81.6 % in good category and in the third cycle increased to 88%. Based on the presentation above, it can be concluded that there is an increase in digital literacy in the aspects of creativity of students' thinking through project-based learning in social studies learning.

A. INTRODUCTION

This research is motivated by the importance of the abilities that must be possessed by students in facing the challenges of the 21st century, where one of them is the ability in digital literacy. Technology is increasingly developing, various information and media are presented at this time and easily accessible to students so that it has become a necessity for students, especially in everyday life such as at home, with peers (peer groups), in the surrounding environment and in school.

Through digital literacy skills students are required to apply the skills of connecting, interpreting, and understanding the ins and outs of the world and the social environment in which students live based on information obtained. As stated by Nair et al. (2012: 75), said that digital literacy skills are needed because with strong literacy skills students have the main tools to see and

interpret information related to the subject matter and even things in their lives.

Students' literacy skills are vital in the process of teaching and learning activities because there is a process of exploring science (dialectics) that builds scientific improvements and the growth of innovation and creativity. Thus learning in increasing the digital literacy of students because it directs students to adapt to changes and technological developments which at the next time shape students into social beings who grow as part of society.

Digital literacy is needed to understand information is a skill in identifying, placing, organizing, evaluating and to make effective information available in solving problems. These skills are also very important to note in this 21st century era in order to ensure that every individual has various learning and innovation

skills, skills in using technology, information media and information literacy and can work and survive using social skills. In realizing all these things one way is through the world of education.

At present, education is in the knowledge age by accelerating the increase in extraordinary knowledge. This accelerated increase in knowledge is supported by the application of digital media and technology called information super highway, Murti 2013 in (Gates, 1996). In the 21st century, education has become increasingly important to ensure students have the skills to learn and innovate, the skills to use technology and information media, and can work and survive using life skills.

The 21st century education world has three educational concepts which were later adapted by the Ministry of Education and Culture of the Republic of Indonesia to develop a new curriculum for elementary schools (SD), junior high schools (SMP), high schools (SMA) and vocational high schools (SMK) . The three concepts as stated by Murti (2014) are 21st Century Skills (Trilling and Fadel, 2009), Scientific Approach (Dyer, et al., 2009) and Authentic Assessment (Wiggins and McTighe, 2011).

These three skills are summarized in a scheme called the rainbow skills of the 21st century / 21st Century rainbow knowledge-skills (Trilling and Fadel, 2009). The scheme was adapted by the p21 nonprofit organization that developed 21st century educational frameworks throughout the world through the site www.p21.org in the state of Tuscon, USA.

Enhancing digital literacy skills can be raised through project based learning by utilizing digital technology such as the internet so that students are familiar with the use of various learning resources.
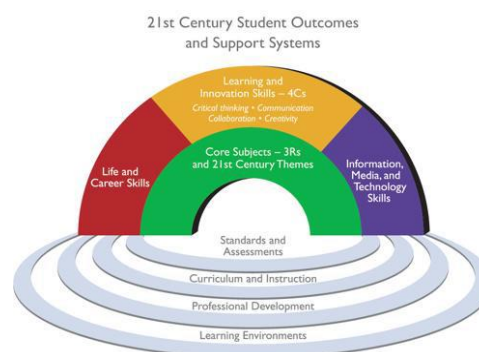

Figure 1. Rainbow of 21st Century Skills adapted by P21 Source: www.p21.org

Based on observations made by researchers in the implementation of field experience (PPL) at SMP Negeri 30 Bandung on February 14, 2018, researchers found problems that emerged in the social studies learning process in the classroom. The problem that arises when learning social studies in class VII-D is with the concept of social studies learning that is difficult to understand so that when in the learning process it is difficult to have an impact on the results of students' learning achievement scores are declining. The IPS learning process activities when the researcher observes, which are ordinary presentation activities without using a projector even though in the classroom there are projector facilities with good conditions that can be used. In addition, when in the learning process, working together to form groups there are some students who do not want to be in groups preferring to do tasks with individuals.

Such are the problems that arise when researchers conduct field observations. For this reason, the author feels that he needs to examine further how efforts to improve digital literacy learning in the aspects of creativity of students' thinking experienced by students of class VII-D in Public Middle School 30 Bandung.

Things like those that have been conveyed become the background of the

research entitled "Improving Digital Literacy on Student Aspects of Thinking Creativity through Project Based Learning (PBL) in Social Studies Learning (Classroom Action Research in Bandung Class VII-D School of 30 Public Junior High Schools)".

B. METHODS

The research method used in this study is the class action research method using the Kemmis MC Spiral Taggart design. Kemmis MC Taggart (in Wiriaatmadja, 2005, p. 67) states that "action research is a spiral cycle consisting of planning, action, observation and reflection which may then be followed by the next spiral cycle". The cycle in this spiral has only stopped if the substantive actions taken by the presenter have been evaluated well, ie the presenter who may be the researcher himself or the teacher partner has mastered the teaching skills that were tried in the study.

In this study the data collection methods used were observation, interviews and documentation.

Data collection techniques used in research based on observation guidance sheets that have been compiled. The data obtained in classroom action research are generally analyzed through qualitative descriptive. Data analysis was performed on each data collected, both quantitative data and qualitative data. Qualitative data were analyzed using simple quantitative methods, namely by percentage (%) and qualitative data were analyzed by making qualitative assessments (categories).

In the data validity researchers use validity commonly used in PTK. Data that has been categorized is then validated according to the model developed, by: "member check, saturation, audit trial, opinion expert" (Hopkins in Wiriaatmadja, 2005, pp. 168-171).

C. RESULTS AND DISCUSSION

The results and discussion in this study, to describe the results of the research that has been done in class VII-D 30th Public Junior High School Bandung. In the results and discussion there is an explanation of the initial description of the research, the planning stage before the implementation of the study, the implementation of actions, the observations carried out together with the implementation of actions and reflections on learning that is in improving digital literacy in the aspects of creativity thinking of students through project based learning in learning Social Studies.

At the planning stage of class action research, based on the results of discussions with partner teachers and research colleagues, some agreement was reached that the researcher would act as the research teacher, while the partner teacher and fellow researchers would become observers who would help make observations on improving digital literacy in the aspects creativity of thinking of students in social studies learning through project based learning. Observer in this study amounted to 3 people with their respective assignments that were different, namely (1) RPP Observer; (2) Field Note Observer; (3) Observer Indicator for Improving Digital Literacy on Students' Thinking Creativity Aspects. In addition, adjustments to the plan and target learning that have been made by the researcher after being consulted in advance with the supervisor are also communicated with partner teachers in the hope that there will be agreement and common understanding between each other.

This research is planned to be carried out in three cycles by implementing a project based learning model. Each cycle is divided into several meetings that are adjusted to the stages in

learning using the project based learning model and the Basic Competence taught. In addition, to support this research researchers collected data assisted with research instruments such as observation, documentation and field notes.
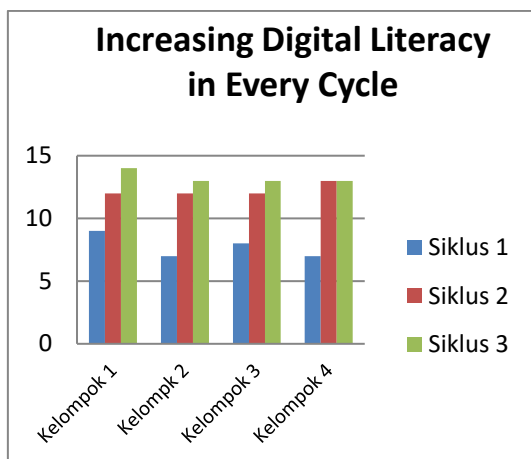

Chart 1. Improvement of Digital Literacy on Student Aspects of Thinking Creativity in Cycle Stages

Based on the results of the assessment in the format of digital literacy assessment on aspects of students' creativity of thinking and the assessment of the application of project based learning in social studies learning, there has been a gradual increase in each cycle.

In the first cycle based on the results of accumulation in the assessment of increasing digital literacy in the aspects of creativity thinking of students by 46.6% with a value of "sufficient". In the second cycle, the increase in digital literacy in the aspect of creativity of students' learning was 81.6% with a value of "good" and in the third cycle the percentage was 88% with a value of "good".

1. Learning Planning That Is Done Through Project Based Learning in Social Studies Learning

In cycle 1, the plan that has been prepared by the researcher and teacher partner is in the form of tasks that are in accordance with the learning material. The material used is "Getting to know the Pre-Literacy and Hindu-Buddhist Period of Periodization in Indonesia". The task given is the task of making a Pre-Literacy heritage table that must be done by a group accompanied by an LKPD whose contents students must find, find, and process information or answers. In the second action, the task is to make the Pre-Literacy heritage table collected and presented. The learning process creates a Pre-Literacy heritage table from starting, searching, processing, analyzing, communicating information as a step in having digital literacy skills.

In the first action the learning activities are focused on debriefing and understanding of the material, then in the second action the learning activities are focused on making a concept map and the third action project students present the results of the group concept map. In general, the learning process using project-based assignments can improve digital literacy in aspects of students' creativity in thinking in social studies. Because in the 21st century education is not only the ability to use media, but how to realize creative and innovative behaviors that are supported and can be done by collaborating with each other. The project-based task activities provide opportunities for students to be able to give their opinions in solving problems that exist in the LKPD, train cooperation and be able to explore digital literacy on aspects of creativity in thinking students are more profound.

2. Implementation of Lessons Learned Through Project Based Learning in Social Studies Learning

The application of good actions must be in accordance with the planning that has been made before, because basically careful planning will greatly affect the success in implementing the action.

In the implementation of the first cycle of action the researcher adjusted between KI, KD, learning material, indicators, evaluations and learning activities that had been made. The implementation carried out in this cycle one is to implement it with two actions, each action is also arranged in the assessment rubric. The material in this first cycle is "Getting to know the Pre-Literacy and Hindu-Buddhist Period of Periodization in Indonesia" which is displayed on the power point with images to make it more interesting. Learning uses the application of tasks to create Pre-Literacy heritage tables that are equipped with performance assessments in the form of assignments accompanied by rubrics. His task through discussion activities working on LKPD in groups using a project based learning model.

In the second cycle, using the material "Hindu-Buddhist Kingdoms in Indonesia" which is displayed on the power point with images to make it more interesting. Not much different from the first cycle of his task through discussion activities working on projects in groups. In this action the project created is a map of the Hindu-Buddhist kingdom concept which consists of five elements, namely the geographical location, leading figures or kings, social and economic life and the relics of the kingdom. In the third cycle students have understood digital literacy in aspects of creativity thinking and can improve the performance of group project results.

3. Improvement of Digital Literacy Through Project Based Learning in Social Studies Learning

Activities seeking information, processing information and analyzing information are reflected in the product and communicate reflected in group presentation activities (performance).

In the results of the first cycle, students still feel confused about the assignment given by the teacher. This is because in the implementation of cycle 1, students do not really understand the concept of digital literacy in the aspect of creativity thinking that provides understanding to students about the process of how to find and find ideas easily and quickly, able to find various alternative ideas, able to produce ideas original ideas and work, able to put ideas in more detail into a work, able to reflect work as problem solving in everyday life.

In the second cycle students have begun to know what is meant by the learning process using digital literacy skills in the aspect of creativity in creative thinking. In the third cycle students have understood digital literacy in aspects of creativity thinking and can improve the performance of project-based product results.

D. CONCLUSION

Based on the problems described above, it can be clearly seen the improvement achieved by students during the research. The achievement of students on digital literacy indicators on aspects of creativity thinking increased gradually from the first cycle to the third cycle

The increase is able to be realized through various factors, one of which is the use of various learning resources used, the application of project based learning learning models that researchers use namely learning activities that are able to stimulate students to search for information themselves through stages in accordance with the rules in the process learn project based learning itself and be

able to support the indicators of students' digital literacy skills.

E. ACKNOWLEDGEMENT

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