The Application of Blended Learning Through Edmodo and Kahoot on Civic Education to Form 21st Century Skills in Secondary School

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Abstract – This study aims to provide an overview of the application of blended learning through edmodo and kahoot on civic education to develop 21st Century Skills. The research design used was a Qualitative Approach. Data were obtained through observation, interviews and documentation studies. The participants in this study were civic education teachers and students. Data were analyzed using the step of data reduction, display data and Verification. Based on the result of the study, it can be conclude that: (1) The development of Information and Communication Technology (ICT) encourages teacher to be able to carry out learning innovation emphasizing competency-oriented approaches to use ICT; (2) Entering the 21st Century, student face the more challenging world so that they need to learn various competencies to support the success of their lives; (3) Edmodo and kahoot is one of the innovation in learning that can be applied in Civic Education learning as blended learning to build 21st Century Skills in secondary School.

Keywords: blended learning, Civic Educations, 21st Century Skills, Edmodo, kahoot

I. INTRODUCTION

World development in 4.0 era, widely known as Industrial Era is identical to the use of information and communication technology in all aspects of human life, including education, specifically in the learning process. This era demands human to have various skills to cope with their life in the 21st century. These fundamental skills are critical thinking and problem solving skills, collaboration, communication and creativity, so schools are demanded to be able to prepare students to become successful individuals to welcome and face the 4.0 era.

Information and communication technology is beneficial for education if it is designed and used well and properly for learning activities. An innovative learning must be created and developed to help students master the multi-dimensional abilities needed in the 21st century. Entering the 21st century, teachers being assumed as the only learning resource become inadequate; therefore, learning source must be supported by and integrated with other learning resources such as printed, audio, visual, audio-visual and computer learning resources and even by the use of mobile phones (gadget) and the internet. This is in line with what has been formulated by the Ministry of Education and Culture of Indonesia stating that the 21st century learning paradigm emphasizes students’ ability to be able to discover information from various sources, to formulate problems, to think analytically and to cooperate and collaborate in solving problems [1].

Referring to learning paradigm in the 2013 curriculum requiring students to think critically, teachers should develop their competencies by utilizing the advance of information and communication technology. This is in accordance with what has been proposed by Eggen and Kauchak (2012) that the standard of 21st century schools or the digital era for teachers and students is related to the use of technology in learning [2].

One of that teachers’ obligatory competencies includes their ability to utilize information and technology in order to create and develop educative learning activities. 21st century learning and curriculum 2013 require teachers’ pedagogical competency to be able to design learning activity to be more interesting and meaningful, teaching and learning activities must be conducted beyond the boundaries of classrooms [3].

Based upon the paradigm above, teaching and learning requires knowledge, attitudes and skills of teachers who can design learning activity by integrating information and communication technology. In this context, the teacher is not only trained to empower teaching skills, but also to improve the skill to master and use the technology. This is in line with Wahab’s statement (2018) stating that “4.0 Era is no longer the era of teaching but the era of learning” [4]. To take advantage of various technological developments as diverse learning resources, it is necessary to develop learning methods that are able to combine and integrate personal potential (people / teachers) and technology. One of the methods is Blended Learning. Blended Learning is learning method combining the advantages of learning through three main learning resources, namely face to face learning, computer-based learning (offline), and through internet/mobile learning (online) [5].
Three fundamental components in Civic Education, namely Civic Knowledge, Civic Skills, and Civic Disposition [6]. In more detail, the first is civic knowledge material includes, knowledge of citizens' rights and responsibilities, human rights, democratic principles and processes, government and non-government institutions, national identity, rule of law and free and impartial justice, constitution, and values and norms in society. Second, civic skills include intellectual skills and participatory skills in the life of the nation and state. Third, civic disposition, this component is actually the most substantive and essential dimension in Civic Education. The civic disposition can be seen as "estuary" of the development of the two previous dimensions.

Civic Education is a subject integrating knowledge, skills and attitudes in developing various competencies. The competences should be adapted to the development in the era and should be able to deal with ICT. In this context, a teacher must be able to design learning by applying information and communication technology that can develop various skills/competencies without eliminating conventional learning, namely through Civic Education learning based on Blended Learning.

The teacher plays an important role in the success and effectiveness of the teaching and learning process in the classroom, so that a teacher must be able to design his learning to be more interesting and meaningful by utilizing various sources including technology. One of alternatives of the utilization of information and communication technology in learning is by using Edmodo and Kahoot applications.

II. THEORETICAL REVIEW

Blended Learning

Blended learning is basically a combination of the eminence of face-to-face and virtual learnings. Elena Mosa (in Prayitna) claimed that the elements mixed are conventional face-to-face learning (classroom lesson) and online learning. Blended Learning is (1) a combination of various learning media modalities; (2) combination of various learning methods, learning theories and pedagogical dimensions, (3) combination of online learning with face to face learning [7]. According to Driscoll, the definition of blended learning are:

a. Learning method combining various web-based technologies, to achieve Educational goals
b. A combination of various learning approaches (such as behaviorism, constructivism, cognitivism) to gain an optimal learning achievement with learning technology.
c. Blended learning is also a combination of many formats, (web-based training, films) with face-to-face learning.
d. Learning method combining technology advances with the orders of actual work to create a good influence on learning and work [8].

Civic Education

Civic Education is a group of subjects intended to increase students' awareness and insight of their status, rights and obligations of their lives in community, nation and state and to improve their quality as human beings [9]. State that Civic Education fosters citizen characteristics that are more directed towards the characteristics of 21st century citizens and are comprehensive because they involve various dimensions of education, politics, socio-culture, and economy [10].

In general, the aim of the Pancasila (The five basic principles of the Republic of Indonesia) and Civic Education in Curriculum 2013 in primary and secondary education is to develop the potential of students in all dimensions of citizenship, namely: Civic Disposition includes civic confidence, civic commitment, and civic responsibility; Civic Knowledge; Civic skills including civic competence and civic responsibility.

21st Century Competences

The US-based Partnership for 21st Century Skills (P21), identifies the competencies needed in the 21st century, namely "The 4Cs"-communication, collaboration, critical thinking, and creativity. These competencies are fundamental to be developed in the context of the core study field and 21st century themes.

21st century skills competency include (1) critical thinking skills and problem solving; (2) communication skills; (3) creativity and innovation; (4) collaboration [11].

Critical thinking skills are fundamental in learning in the 21st century. Critical thinking skills include the ability to access, analyze, synthesize information that can be learned, trained and mastered [12]. Critical thinking skills also describe other skills such as communication and information skills, as well as the ability to examine, analyze, interpret, and evaluate evidence.

Good communication skills are very valuable skills in the world of work and everyday life. States that "communication is the process of sorting, selecting and sending symbols in such a way in order to help listeners generate responses / meanings of thoughts similar to those intended by communicators".

Collaboration in the learning process is a form of collaboration with one another to help and complement each other to perform certain tasks in order to obtain a predetermined goal. Various evidence shows that students who work cooperatively can reach a higher level of ability when it is viewed from the results of thinking and the ability to store information for a long period of time than students who work individually.

Learning design will play a central role in the success of 21st century learning. Creativity and the ability of teachers to design interesting learning activities are very important. State that effective and innovative learning practices will differ according to subjects, but the emphasis is on things that are not much different, digital competence that focuses on individual creativity and performance; strategies for meta-learning, including designed learning; inductive and creative reasoning models, and problem solving; compilation of collaborative learning content and knowledge formation; horizontal learning (peer-to-peer), and other things [13].

21st century learning must be relevant, interesting, effective and student-centered. Therefore, it is important to
change the "closed class" learning model into a student-centered model. The teacher must be comfortable in managing class dynamics and support independent learning as well as the teacher must support the exploration and acquisition of new knowledge and skills to prepare students towards the 21st century [14].

Edmodo

Edmodo is a social networking based learning platform intended for teachers, students and parents of students [15]. Edmodo is an application greatly helping teachers and students conduct the teaching and learning process. Its features include: 1) Polling, used by the teacher to find out student responses and to make students understand the meaning of the lesson they just learned; 2) Gradbook, used by the teacher to assess students competence or proficiency manually or automatically; 3) File and Links, used to send notes, links and or attachments so students can better understand the lessons given; 4) Quiz, used by the teacher to provide online evaluations (assessment) to students in the form of multiple choices, short and descriptive questions; 5) Library, used by teachers to upload teaching materials needed that can be easily accessed by students; 6) Assignment, used by teachers to give online assignments to students; 7) Badge Award, used by the teacher to reward students both individually and in groups; 8) Parent Code can be utilized by parents to monitor the learning process of their children.

Kahoot

Kahoot is a game based learning platform. The link of Kahoot for the teacher is kahoot.com, while for the students the link is kahoot.it. Kahoot has 3 features, namely: quiz, discussion and survey. Quiz can be used during the pre-test before learning begins in order to bridge the new material, do training, give post-tests, strengthen material, and do remedial, do enrichment and others. The equipment that must be available to play these games is 1) the laptop, used to make questions and do control by the teacher, 2) the projector, used to display the question on the screen so that it can be seen by all students, 3) devices for students: mobile phone, laptop or tablet.

III. RESEARCH METHODS

This study employed a qualitative approach. With a qualitative approach, it was expected to be able to obtain information and data naturally and be able to explore deeply the research problems. Creswell (2015: 31) states that qualitative research is most suitable for answering research problems with unknown variables and need to be explored.

The method employed in this research was descriptive qualitative. Descriptive qualitative is a method of examining the status of a group of people, an object, a set of conditions, a system of thought or a class of events in the present [16]. The purpose of this method is to make a description and to picture systematically, factually and accurately the facts, the characteristics and the relationship between phenomena investigated. Descriptive research focuses on solving actual problems as they appear during study.

Participants or research subjects are very important and decisive in research. Therefore, participants must be determined before the collecting the data. Participants in this study were teachers of civic education and the students' grade VII. This study was conducted in Junior High School 12 Bandung located at Setiabudhi street No. 195 Bandung.

IV. RESULTS AND DISCUSSION

Teachers can organize blended learning by considering available facilities and infrastructure, teacher's ability, and students' readiness. The implementation of proper blended learning will be very useful for teachers in improving the quality of learning. Blended learning through Edmodo and Kahoot encourage students to be able to do observations, ask questions, give reason, and communicate what is obtained and known after the lesson. Through this approach students have better attitude, skills and knowledge competency. They will be more creative, innovative, and more productive.

Based on the findings of this study, it can be assumed that the use of Edmodo and Kahoot in learning can develop and improve student skills such as communication skills, collaboration, critical thinking and creativity. It is concluded that in online learning students are encouraged to interact with their partners in problem solving activities and information gaps [20]. They work collaboratively in computer-supported activities, both computer-mediated and face-to-face communication. Other studies that are in line with the findings is the study accomplished that online quiz as a formative assessment tool enables greater interaction between teachers and their students, and allow students to make decisions about their study and build their knowledge of their experiences [21].

Referring to the observation result, the application of blended learning through Edmodo and Kahoot can develop the ability to collaborate, to socialize, to control ego and emotions and responsibility through working in teams or learning in groups. In the present century the skills needed is collaboration skill because it is impossible for people to work individually. The results of the observation showed that there was collaboration between students that was identified from working in groups, exchanging knowledge, giving each other files, complementing students' answers during discussions.

V. CONCLUSION

Based on the findings, it can be concluded that (1) The development of Information and Communication Technology (ICT) encourages teacher to be able to carry out learning innovation emphasizing competency-oriented approaches to the use ICT; (2) Entering the 21st Century, student face the more challenging world so that they need to learn various competencies to support the success of their lives; (3) Edmodo and Kahoot is one of the innovation in learning that can be applied in Civic Education learning as blended learning to build 21st Century Skills in secondary School.

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