Project Citizen Learning Model: Skills of Critical Thinking and 21st Century Learning in Higher Education

Eka Jayadiputra[1], Dedi Mulyasana[2], Angger Saloko[3], Odang Suparman[4]
ekaefridajayadiputra@yahoo.co.id[1], dedimulyasana@uninus.ac.id[2],
anggersaloko@uninus.ac.id[3], odang.suparman071153@gmail.com[4]

Universitas Islam Nusantara, Indonesia[1,2,3,4]

Abstract. This Research aims to discover: 1) about the development of students ' critical thinking skills through Project Citizen learning at the college level; 2) How Project Citizen can conduct 21st century learning at higher education level. This study uses qualitative analysis with observation research instruments, interviews and documentation studies. This research was conducted in universities, namely in the PPKn Universitas Islam Nusantara (UNINUS) and the study program of Universitas Muhammadiyah Purwokerto (UMP). The results of this study showed that the development of student thinking skills through Project citizen in college can be implemented properly. This can be seen in the learning process of a citizen project, each student directed to be able to think critically through the process of selecting a problem that will be studied in class, think of inquiry by identifying the problem and collecting Information relating to the problem, creative thinking by developing a class portfolio through the creation of an impression portfolio in the form of a panel board that contains a variety of student creations and a portfolio of documents that contain a variety of things relating to class studies, and developing communication and collaboration skills through portfolio refiners in front of the jury. Thus a series of learning process Citizen Project can implement 21st century learning.

Keywords: Project Citizen; Critical Thinking Skills; 21st Century Learning.

1 Introduction

Current demands of globalization current require every country in the world to improve the quality of its human resources in order to cope with global competition in a competitive and comprehensive manner. One of the quality improvement of human resources is through improved education process. Because education is crucial in supporting global economic growth, such as Kennedy's stated that "The 'new' global economy required ideas, innovation, creativity and critical thinking to ensure economic competitiveness" [1]. Based on the opinion we can be able to improve that economic growth will increase if supported by adequate human quality and competent. To run the economy. But if you look at reality in our country, the quality of Indonesia's human resources is still relatively low. This data was obtained from the United Nations Development Program (UNDP) in its Human Development Report (2016) that Indonesia's Human Development Index (HDI) in 2015 was ranked 113 out of 188 countries in the world, down from 110 in 2014, whereas in countries ASEAN Indonesia is far behind the Philippines (83), Thailand (76), Malaysia (59), Brunei Darussalam (33) and Singapore (25). Therefore, the quality of education in Indonesia needs

to be improved. One way to improve the quality of education is through improving the learning process. Learning that currently needs to be developed is learning in the 21st century that focuses on communication skills, collaboration, critical thinking and problem solving, creativity and innovation.

Thus, the learning process must be directed at the development of world citizens who are able to manage crises [2], the ability to see and approach problems as members of the global community, the ability to cooperate with others in a cooperative manner and accept responsibility for their roles / tasks in society , the ability to understand, accept, respect differences, the capacity to think in critical and systematic ways, the desire to resolve conflicts in a nonviolent way, the desire to change lifestyles and consumptive habits to protect the environment, the ability to be sensitive and protect human rights, the desire and ability to participate in politics at the local, national and international level [3].

The National Research Council [4] has initiated the topics of learning and assessment of XXI century skills. The 21st century Learning skill type required by learners to have a career readiness and attend college education and career readiness is: 1) Cognitive skills that include critical thinking, nonroutine problem solving, and system thinking; 2) interpersonal skills which include complex communication, social skills, teamwork, cultural sensitivity, and accepting differences; 3) intrapersonal skills that include self-management, time management, self-development, self-arrangement, adaptability, and executive function. Then, The Assessment and Teaching of 21st Century Skills [5] has offered a framework to organize different types of learning skills (students ' competencies) of the 21st century. This framework covers four skill classes, namely: 1) Way of thinking, covering creativity and innovation, critical thinking, problem solving, and decision-making, and metacognition or learning to learn, 2) How it works, including communication and collaboration or teamwork, 3) Tools for working, covering information literacy and literacy communication and information technology (ICT), 4) living in the world, covering citizenship, life and career skills, and personal and social responsibility.

The Educational Testing Service (ETS) [6] defines the 21st Century learning Skills (competency student) as: 1) The ability to collect and obtain information, 2) Organizing and managing information, 3) Evaluate the quality, relevance and usefulness of the information, and 4) Generate accurate information through the use of existing sources. While The North Central Regional Education Laboratory [7] identifies the broader study skills (competency student) of the 21st century as the achievement of XXI century learning through digital literacy, inventive thinking, effective communication, and high productivity.

Likewise in the learning of Pancasila Education and Citizenship in Indonesia, it needs to be directed to 21st century learning to adjust to the demands of the current needs. One learning model that can accommodate 21st century learning in Pancasila Education and Citizenship in Indonesia is Project Citizen. The Project Citizen Model is a form of citizenship practice designed to help students understand theory in depth through empirical practical learning experiences and encourage students to have cognitive, affective, and psychomotor competencies [8]. Because higher education institutions have a mission of teaching, research and community service [8], there needs to be innovation to find the best learning model of its time. This learning model can also train students to be responsible, be able to assess and influence public policy and be able to actively participate in activities between students, between schools, and between communities.

The model citizen project is based on the following [8] thoughts: 1) The four pillars of education designed by UNESCO are learning to do, learning to know, learning to be, learning to life together. 2) The view of constructivism focuses on the knowledge that is built by the students themselves. 3) Democratic teaching, striving for schools as the center of democratic life through the process of learning democracy with democratic teaching in which learning is based on democratic values that value ability, uphold justice, apply equality of opportunity and pay attention to diversity of students. Furthermore Budimansyah [8] stated the principle project citizen learning principles, namely "the principle of active student learning, cooperative learning groups, participatory learning, and reactive teaching".

Thus, the citizen project model is one of the learning models that aims to increase the meaningfulness of learning for students. The selection of learning models that are not appropriate in social learning, will not improve students' critical thinking skills [9]. In the project citizen model, students find directly the material they have to learn through the inquiry process, ask questions, work together with other friends, solve problems, think critically, come up with new ideas, and can develop creativity through making the panel displayed in the showcase event. Through this learning, students are able to develop all their potentials, both cognitive, affective, and psychomotor.

Based on the discussion above, this article examines project citizens: critical thinking skills and 21st century learning at the College level. This study is expected to provide benefits, especially for the improvement of PPKn learning in Higher Education, especially in the Pancasila and Citizenship Education courses in Indonesia so that citizens can be equipped with 21st century competence in the future, as well as the higher education functions that Plato founded were for improve the quality of human resources to play a concrete role and its contribution in society [10].

2 Method

The research approach that the author uses in this study is a qualitative approach, because the focus of the problem under study requires in-depth observation in the scope of his life, interacting with them, trying to understand the language of one and their interpretation of the world around them [11]. The research method used in this research is descriptive method, because the writer will describe an event or ongoing event in an institution based on the actual situation. This is as stated by Sudjana and Ibrahim that descriptive research is "research that seeks to describe a phenomenon, event, event that occurs at the present time [12]. In other words descriptive research takes the problem or attention to the actual problems as they were at the time the study was conducted ". While the form of research used in this study is a case study considering the study of the problem under study is being carried out or carried out at a tertiary institution that has used a citizen project model for more or less three years [13].

The locations used in this study were the PPKn FKIP Universitas Islam Nusantara Study Program and the PPKn program in Universitas Muhammadiyah Purwokerto. Taking the subject of this study was done purposively (aiming) because in the naturalistic method it does not use random or random sampling and does not use a large population and sample ". Samples in qualitative research are usually few and are chosen according to the purpose of the study. The

research subjects in this study were Lecturers and Students PPKn UNINUS and Lecturers and students PPKn UMP.

The researcher is the main instrument in this study, assisted by several other data collection techniques, as follows: Observation, Interview, Documentation study, Literature Study that is studying various books, archives, scientific magazines or other reading sources that are related to the focus of the problem namely the use of project citizen learning models, critical thinking skills and and 21st century learning.

Then the data processing technique is done after the data is obtained from observations, interviews, documentation studies and literature studies. Data is reduced through abstract creation. Moleong says that abstraction is an attempt to make a summary of the core, process and statements that need to be maintained so that it remains in it [14]. The next step is to arrange in units which are then categorized in the next step while making coding. The final stage of this data analysis is to check the validity of the data in the form of data analysis where the implementation process begins after leaving the field, because if the new implementation starts when the research is completed it will be very troublesome for the writer. Furthermore, it states the steps that can be followed in analyzing qualitative data, namely: Data Reduction, Data Display and Taking Conclusions and verification.

3 Result and Discussion

Based on the results of research conducted at Universitas Islam Nusantara and Universitas Muhammadiyah Purwokerto, students ' critical thinking skills can be developed very well and 21st century learning can be implemented through learning Project Citizen. This can be directly proportional to the citizenship skills expected in the 21st century. The scheme of research results that authors can describe as follows:
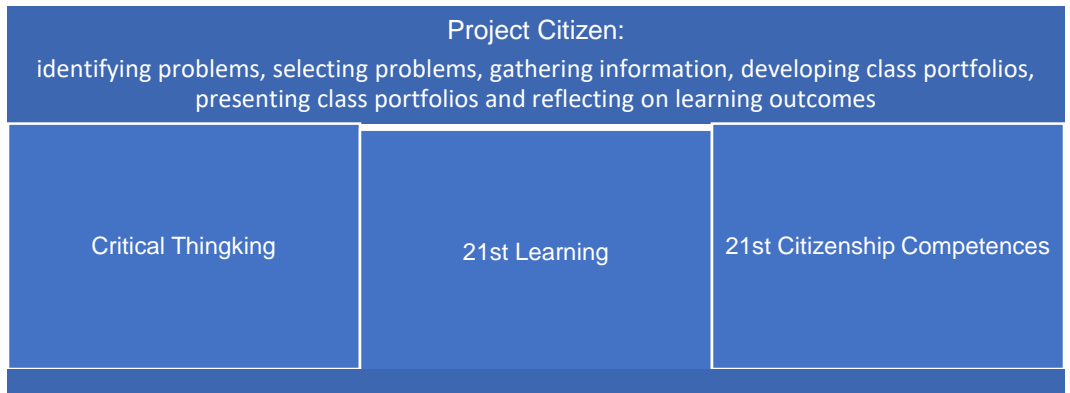
Based on the table above,we can be seen from the classroom situation where students actively participate in the learning process. Citizen project learning starts with activities identifying problems, selecting problems, gathering information, developing class portfolios,

presenting class portfolios and reflecting on learning outcomes. In this series of learning, students look enthusiastic about learning.

In learning PPKn by using a citizen project, the first step is to identify the problem. In this activity, students carry out brainstorming or brainstorming. This activity aims to hone the level of sensitivity of students to the problems that exist in the surrounding environment. They observe the problems that exist in the surrounding environment, actively asking questions, actively raising opinions, responding, giving answers and expressing their feelings, ideas and ideas. This is as stated by Orlich [15], that the ability associated with effective critical thinking includes: (1) observing; (2) identify patterns, relationships, cause-effect relationships, reason-fault assumptions, logic errors. Student activities in identifying problems include finding various information about various issues that can be used as class study material. The problem was obtained from various sources of information both from the results of discussions with friends, as well as information from other sources about the problems that are happening. In addition, in this activity, students collect materials / problems and discuss about what problems are subject to class studies. From these activities it can be seen that through learning citizen project students are required to be sensitive to the problems that are happening in the surrounding environment and challenged to criticize and seek and provide solutions to these problems. Thus, the learning process is more interesting, challenging and is student center, inquiry and discovery leaning because students dig more information independently, so they apply the four pillars of education designed by UNESCO namely learning to do, learning to know, learning to be, learning to life together [6].

Then the second step is the activity of choosing the problem. In this activity students are given the freedom to choose one of the problems that they consider important to be solved immediately. Each student can express their opinions and respect the opinions of others who are different so as to create an atmosphere that is open, harmonious, full of togetherness and balance. In this activity the learning process takes place democratically where the class can have a role as a democratic laboratory supported by Democratic teaching that seeks schools as the center of democratic life through a democratic learning process that is based on democratic values that value ability, upholds justice, applies equality of opportunity and pay attention to the diversity of students [16].

The third step of the citizen project is the activity of gathering information. Each student is trained to construct their own knowledge, and is required to have the courage and good communication skills with outsiders. Through the process of gathering information students can build their own knowledge so that the knowledge they acquire is meaningful. Thus learning using the project citizen has implemented a view of constructivism that focuses on the knowledge that is built by students. This can be seen from the activities of students to actively ask questions about things they do not know so that the tendency to think critically occurs in themselves. In addition, in this activity there was collaboration between one student and another student. The aspect of cooperation can be seen when students conduct information searches in the field to conduct interviews, search for information on the internet and other mass media in order to gather various information needed in the preparation of portfolio panels. Thus, students learn to cooperate (cooperative learning) and are responsible for their respective assignments.

The fourth step is the activity of developing a class portfolio. In this activity students can independently link subject matter with their different life contexts. Students are encouraged to design and carry out scientific activities, so they are motivated to apply the material that has been

learned and this means that civic knowledge, civic disposition and civic skills can be developed optimally [18]. Civic knowledge is related to citizenship knowledge which is manifested in the form of five important questions that must be continually asked as a source of citizenship education learning, namely: 1) What is the life of citizenship, politics, and government ?; 2) What are the basics of the political system ?; 3) How does the government formed by the constitution embody democratic goals, values and principles ?; 4) What is the relationship between one country and other countries and its position in international matters ?; and 5) what is the role of citizens in democracy ?. In addition, civic disposition relates to the character of citizenship, one of which can be honed through communication and interaction with others, because interaction and communication requires good ethics to build a good communication network. Then, civic skills related to Citizenship Skills are developed based on citizenship knowledge. It is intended that the knowledge that has been obtained becomes something meaningful and can be utilized in dealing with the problems of national and state life. Civic skills include intellectual skills and participatory skills. Critical thinking skills are one of the intellectual skills that can be developed in PPKn learning with the project citizen model. From this critical thinking skill, then the participatory skill will be realized because students are given the space to appreciate what they are studying through the panel boards they make themselves by sharing their own artistic creations and pouring them into the panel boards. Next, the panel boards will be displayed in the show case activities to present what they have learned by displaying various art creations that they have prepared to support their best performance during the show case.

The fifth step is the show case activity. In this activity students present what they have done before the jury and audience. They describe the various information that they have compiled in their portfolio of documents, panel boards accompanied by various artistic creations that they have prepared to enliven their performance. Also in this stage the show case participants are given the opportunity to have discussions with the judges and the audience about the problems they are studying. From this activity we can see students' critical thinking skills, ability to solve problems, the ability to communicate in public, the ability to provide scientific arguments and also the ability to work together in teams in completing assignments in accordance with the field of group study.

The sixth step is reflection. In this activity, students are given the opportunity to reflect on what they have learned, and reflect on what still needs to be learned, what they will do in real life related to the understanding they have gained.

Based on the explanation above, if we look deeper, project citizens have fulfilled 21st century learning because in project citizens students are trained to be proficient in: 1) communicating with others. In this case, students can understand, manage, and create effective communication in various forms and contents verbally, in writing, and multimedia. This can be seen when students do show case activities. They have ample opportunities to express their ideas, both when discussing with friends in group discussions and when doing show case activities. 2) Cooperation is an activity carried out jointly. In this case, students can demonstrate their ability to do group collaboration and leadership; adapt to various roles and responsibilities; work productively with others; put empathy in its place; respect for different perspectives. students also carry out personal responsibility and personal flexibility, at work, and public relations; set and achieve high standards and goals for yourself and others. 3) Critical Thinking and Problem Solving. Through the project citizen activities critical thinking activities of students can be explored optimally. Students use their abilities to try to explore various information that they do

not know, assess the problems they find whether it is suitable to be used as a topic of study or not, facing problems that are studied independently, compiling, disclosing, analyzing, and solving problems. 4) Creativity and Innovation.

In the citizen project, students are trained to develop, implement, and convey new ideas to others, express their feelings and express them in oral or written form or digital media to be able to convey the messages they want to convey. In line with Kanirawati's opinion that in the process of critical thinking there must be a development so that students are required to think more specifically so that they can identify various problems found one day [19]. In addition students are open and responsive to new and different perspectives so that learning biases respect one another.

4 Conclusion

Project citizens provide learning experiences that can help students integrate new knowledge and generate brilliant reasoning through critical, creative, innovative, analytical, communicative and collaborative thinking processes so that students can use their acquired knowledge meaningfully and provide opportunities for them to make decisions and responsible for the decisions that have been taken. Seeing the learning process that has been done, the project citizen can accommodate Middle Order Thinking Skills namely C3 (applying) and C-4 (analyzing), and supporting the increase of HOTS (Higher Order Thinking Skills), namely C-5 (evaluating), and C-6 (create). Thus the citizen project can help students become citizens who are able to welcome the 21st century with flexibility, adaptability, initiative and independence, and have social and cultural skills, productive and accountable, have leadership and responsibility, also have high literacy abilities as mandated by Partnership for 21st Century [20].

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