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APPLICATION OF PROJECT CITIZEN LEARNING MODEL: DESCRIPTIVE ANALYSIS OF 21ST CENTURY SKILLS OF HIGH SVHOOL STUDENTS

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ABSTRAK

Penelitian ini bertujuan untuk menganalisis keterampilan abad 21 siswa melalui penerapan model pembelajaran *project citizen* pada mata pelajaran PPKn. Penelitian ini merupakan penelitian deskriptif kuantitatif dengan jenis penelitian studi kasus yang menggunakan desain penelitian one shot case study. Sampel dalam penelitian ini adalah siswa kelas XI SMAN 10 Fajar Harapan yang berjumlah 25 orang siswa yang menggunakan teknik pengambilan sampel purposive sampling. Selanjutnya untuk pengumpulan data dari penelitian ini menggunakan angket (kuesioner) tentang keterampilan abad 21 yang telah dibagikan kepada siswa XI SMAN 10 Fajar Harapan yang menggunakan skala likert 1-5. Hasil penelitian menunjukkan bahwa rata-rata secara keseluruhan bahwa *learning and innovation skills* siswa XI SMAN 10 Fajar Harapan sebesar 4,094 dari jumlah angket yang telah di analisis menggunakan program SPSS dengan menggunakan skala likert 1-5. Kemudian nilai tertinggi dan terendah masing-masing 4,925 dan 3,375. selanjutnya berdasarkan analisis distribusi data keterampilan abad 21 siswa maka didapatkan bahwa 60% siswa berada di kategori baik dari total 25 orang siswa di kelas XI IPA 3 XII SMAN 10 Fajar Harapan . *Learning and innovation skills* dari tiap-tiap indikator maka didapatkan persen yaitu keterampilan berpikir kritis 56%, keterampilan pemecahan masalah 52%, keterampilan berkomunikasi 48%, keterampilan berkolaborasi 44%, keterampilan berkreativitas 64% dan keterampilan berinovasi 60%. Berdasarkan hasil penelitian maka dapat disimpulkan bahwa *learning and innovation skills* siswa setelah diterapkannya model *project citizen* dalam pembelajaran PPKn berada dalam kategori baik.

Kata Kunci : *keterampilan abad 21, keterampilan belajar dan inovasi, project citizen*

ABSTRACT

This study aims to analyze students' 21st Century Skills through the application of citizen project learning models on PPKn subjects. This research is a quantitative descriptive study with a type of

case study research that uses a one shot case study research design. The sample in this study were students of class XI MIPA 3 at SMAN 10 Fajar Harapan, amounting to 25 students using purposive sampling technique. Furthermore, for collecting data from this study using a questionnaire (questionnaire) about 21st Century Skills that have been distributed to students of SMAN 10 Fajar Harapan who use the Likert scale 1-5. The results showed that the overall average of 21st Century Skills of SMAN 10 Fajar students was 4.094 out of the number of questionnaires analyzed using the SPSS program using the Likert scale 1-5. Then the highest and lowest values 4,925 and 3,375, respectively. then based on the analysis of student 21st Century Skills data distribution, it was found that 60% of students were in the good category out of a total of 25 students in class XI IPA 3 of SMAN 10 Fajar Harapan. The learning and innovation skills of each indicator obtained percent namely 56% critical thinking skills, 52% problem solving skills, 48% communication skills, 44% collaboration skills, 64% creativity skills and 60% innovation skills. Based on the results of the study, it can be concluded that students' 21st Century Skills after the implementation of citizen project models in PPKn learning are in a good category.

Keywords: *21st century skills, learning and innovation skills, project citizen*

INTRODUCTION

Education is an effort to educate the next generation. The existence of education will be an investment for them in implementing and regulating the life of the nation into an advanced and educated nation (Suwarno, 2006). Today we live in an age called the age of globalization. A beneficial effect in the world of education is to facilitate students' access to learning. Information and communication technology that is growing rapidly in the 21st century provides the widest opportunity to innovate in various fields of life, including in the field of education. An era that leads to open and increasingly fierce competence globally to acquire and improve the skills needed by modern society.

Knowledge has become important in the 21st century and people need to acquire such skills to enter the workforce called 21st century skills. In general, 21st century skills include collaboration, communication, digital literacy, citizenship, problem solving, critical thinking, creativity and productivity (Voogt & Roblin, 2012; Yusuf et al., 2019). In general, 21st century skills are skills that include collaboration skills, communication, critical thinking, problem solving, creativity, innovation, productivity, digital literacy and skills using ICT (Chu, et al., 2017; Trilling & Fadel, 2009; Azhari & Fajri, 2021). These 21st-century skills are skills that are characterized as very important needs in people's lives (Care & McGaw, 2012).

A number of national frameworks have been described to be further elaborated and defined into 21st century skills (Ferrari, 2012; Griffin & Care, 2012). These 21st century skills need to be studied by students to face the world of work. Jobs in the 21st century not only require technical preparation in getting things done well, but workers also need sufficient skills to adjust to changes in the requirements of the work it self (Ahmad et al., 2013; Carevale & Smith, 2013). So the world of education needs to support this national framework to improve 21st century students' skills.

To achieve these skills, students need an education program that is able to develop human resources to become competitive individuals. This is in accordance with what was conveyed by Mayasari stating that education must prepare the next generation of the nation that is able to compete with the challenges of the 21st century. One way is to equip students with 21st century

skills in the learning process (Maryani, Martaningsih & Bhakti, 2017). But unfortunately, many students don't get 21st century skills when they study at school. According to Saavedra, explain the cause is the learning model used by teachers who are still teacher-oriented, not students, so that the ongoing learning process is not student-centered (Saavedra & Opfer, 2012).

Another inhibiting factor in developing 21st century skills from students themselves is because they do not directly learn real skills in the learning process on different subjects (Mayasari et al., 2016). But 21st century skills must be taught and instilled in students through learning models in solving things on certain subjects. According to Mayasari, explained that the learning process can train the skills of 21st century students using student-centered learning models such as project-based learning models, citizen project models, problem-based models and others (Mayasari et al., 2016).

A study of 2430 students in secondary schools regarding practical needs in the classroom has found that uninteresting teaching methods are one of the main problems affecting 21st century learning outcomes (Teemuangsai & Meesok, 2017) The learning process in schools must be able to develop the skills of 21st century students, one of which is the development of creativity. The development of creativity aims to prepare students to face challenges in the world of work (Kind & Kind, 2017).

Responding to changes in learning due to the demands of 21st century skills, the Indonesian government has developed the 2013 curriculum. Education in the context of the 2013 curriculum is oriented to produce productive, creative, innovative and practical Indonesians (Abidin, 2014) Orientation is an effort to meet the demands of the 21st century, in fact the learning process in the context of the 2013 curriculum cannot fully develop 21st century skills. This requires follow-up in the learning process in the class with the collaboration of existing learning models.

Innovative strategies, models and learning approaches are very important to be able to maximize the results of the learning process. Students can get the results expected by the teacher correctly by choosing a learning model that is appropriate to the material and conditions of the learning environment (Hasan et al., 2019). One learning model that can develop 21st century skills is a project-based model. In this study the citizen project learning model will be used as a model that can enhance 21st century skills. The process of selecting this model is because it is new and problem oriented and project. Several studies have been conducted with this model in improving critical and creative thinking skills that are part of 21st century skills. However, this study attempts to examine the overall 21st century skills specifically the variables of learning and innovation skills which consist of indicators, critical thinking, collaboration, communication, problem solving, creativity and innovation. Regarding this there has been no research that has done specifically in the context of 21st century skills using a project citizen model.

The project citizen model is one of the problem-based instructinal treatments to develop knowledge, skills and character of democratic citizenship that enables and encourages participation in government civil society (Budimansyah, 2019). Field-based education programs or problems are one of the learning models that can improve the ability to provide opportunities for students (Kinslow, Sadler & Nguyen, 2019). The citizen project learning model is a learning model that educates students not only to be able to understand scientific concepts and principles, but also to develop their ability to work together, be innovative, creative, think critically through

real learning activities. Based on the results of the research, the citizen learning model can develop critical thinking skills, confidence, work together, understand, commit and behave well and support others (Fajri, Yusuf & Ruslan, 2019).

According to Budimansyah. He explained that citizen projects have learning steps including: 1) identifying problems, 2) choosing problems for classroom studies, 3) gathering information, 4) developing portfolios, 5) presenting portfolios and 6) reflecting learning experiences (Budimansyah, 2009).

RESEARCH METHODS

This study uses quantitative research methods with the type of case study research that uses a one shot case study research design. This research was conducted in class XI of SMA 10 Fajar Harapan Banda Aceh in class XI IPA. The sample in this study were students of class XI IPA 3 XII of SMAN 10 Fajar Harapan Banda Aceh who gathered 25 students selected by purposive sampling. The variables in this study are 21st Century Skills which are one indicator of 21st century skills. The instruments used in this study were questionnaires that used a 1-5 Likert scale to learn how to study students using the Citizen project model. The data analysis technique used is descriptive statistical analysis which is then carried out by calculating the average score of each indicator in the variable learning and innovation skills.

RESULT AND DISCUSSION

The learning process was carried out on PPkn subjects with country threat subjects in class XI IPA 3 who used the project citizen model. The learning process in everyday life using citizen project models can be presented in the steps of the learning process in the table below.

Table 1. Steps in the Project Citizen Model

No	Step	Teacher Activities	Student Activities
1	Identifying public policy problems in your community.	The teacher explains the purpose. Description of learning and material that occurred about threats to the NKRI.	Students participate with friends in finding problems related to threats to the NKRI that are around the community.
2	Selecting a problem for class study	Teachers guide students in choosing problems that will be used as study material in the class of problems that are obtained according to threats to the NKRI.	Students are given the task to select and determine each problem related to the threat to the NKRI which will be used as study material in the class to find the solution to the problem.
3	Gathering information on the problem your class will study	Teachers guide students in the process of gathering information that can be used as material in solving problems that occur that are related to threats to the NKRI.	Students are given their respective assignments in the process of gathering information on problems that are used as class study materials selected in the

			previous step that relate to threats to the NKRI.
4	Developing a class portofolio	Teacher Distributes students into 4 groups with each group having their respective duties.	Students develop and work on portfolios in accordance with their respective groups regarding problems that occur about threats to the NKRI.
5	Presenting your portofolio	Teachers and judges provide corrections to the results of portfolio work and presentations of students from each group.	Each group presents their work in turn from the first group to the fourth group.
6	Reflecting on your learning experience	The teacher gives an explanation of what has been presented by the student in the previous step and provides a correction if there is an error.	Students reflect and improve according to what is instructed by the jury and also the teacher for future improvements to what they have done in the previous steps.

21st Century Skills

Students' 21st Century Skills in the study were analyzed on the results of the questionnaire they filled in after getting approval with the project citizen model. The recapitulation of the questionnaire results in the analysis of 21st Century Skills presented in the table below.

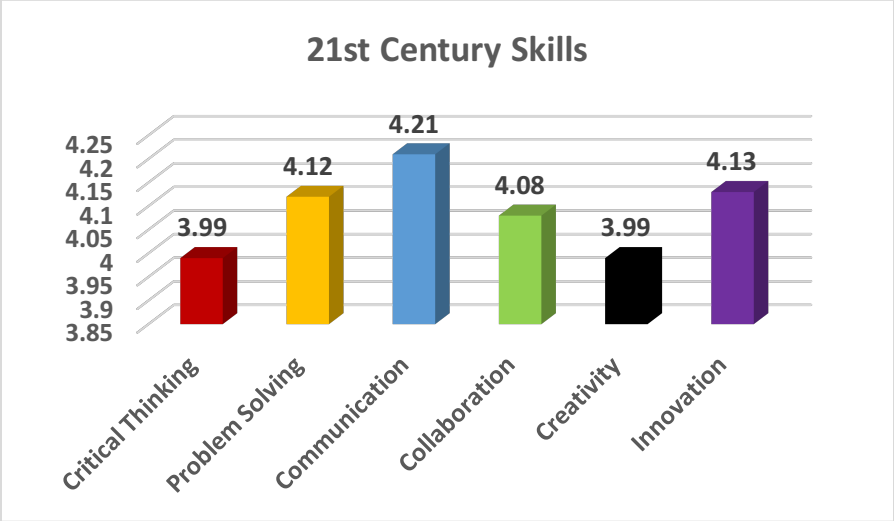
Table 2. frequency distribution of percentages and categories

No.	Score	Frequency	Persentasce %	Category
1	1,00-1,80	0	0 %	Very not good
2	1,81-2,60	0	0 %	Not good
3	2,61-3,40	3	12 %	Enough
4	3,41-4,20	14	56 %	Good
5	4,21-5,00	8	32 %	Very good
Jml		25	100 %	

Percentage Based on the frequency distribution table of percentages and the categories of learning and innovating skills of XII students of SMAN 10 Fajar Harapan in class XII IPA 1, it can be concluded that students who get the highest score score are in the good category with 14 students with 56%. Furthermore, the score is in the category of Very good 8 students with a percentage of 32% and enough category scores only 3 students with a percentage of 12%. Based on these results, it can be concluded that the 21st Century Skills of XII students of SMAN 10 Fajar Harapan are in good category.

After getting the overall results about skills learning and innovating students using the citizen project model, below is an explanation of each indicator of 21st Century Skills. Here is a picture of the skill level diagram. Each indicator in the variable 21st Century Skills.

Figure 1. the level of 21st Century Skills of each indicator



Based on the picture above, it can be concluded that the citizen project model can improve 21st Century Skills. From data distribution Every indicator of innovation learning skills. Obtaining results for critical thinking skills gets an average value of 3.99, problem solving skills get an average value of 4.12, communication skills 4.21, collaboration skills 4,021, collaboration skills 4.08, creative skills 3.99, and innovation skills from 4.13.

Indicator of Critical Thinking Skills

Data from the analysis of learning and innovating skills for indicators of critical skills possessed by students using the citizen project model can be seen in the figure which received an average score of 3.99. This can answer the questions of the XI students of SMAN 10 Fajar Harapan in the good category for indicators of critical thinking skills. below is the distribution of data about frequency distribution and categories for indicators of students' critical thinking abilities.

Table 2. Distribution of Frequency The percentage of indicators of critical thinking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2,61-3,40	3	12,0	12,0	12,0
	3,41-4,20	14	56,0	56,0	68,0
	4,21-5,00	8	32,0	32,0	100,0
	Total	25	100,0	100,0	

Based on the table about frequency distribution, percentage indicator, critical, can be calculated, from 25 students, 14 students in the good category with a percentage of 56%. then the students are in the category of Very Good 8 students with a percentage of 32% and 3 students in a sufficient category with a percentage of 12%. Based on these results, the results can be categorized well, according to the results of research conducted by Nusarastriya et al, explaining how to develop critical thinking skills through projects, citizens, improve research results, and discuss supportive issues. , use information, determine a rational and emotional climate, the ability to show data analysis, the ability to debate and the ability to use licenses (Nusarastriya, Wahab & Budimansyah, 2013).

Indicator of Problem Solving Skills

This indicator of problem solving skills reaches an average value of 4.12 based on the image above so that the students on this indicator fit the overall good category. Below is the distribution of data about frequency distribution and categories for indicators of complexity of detailed problems.

Table 3. Distribution Frequency Percentage of problem solving indicators

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2,61-3,40	2	8,0	8,0	8,0
	3,41-4,20	13	52,0	52,0	60,0
	4,21-5,00	10	40,0	40,0	100,0
	Total	25	100,0	100,0	

Based on the distribution table for indicators of problem counting skills from a total of 25 students, 13 students depend on the good category with a percentage of 52%. The rest are in the very good and sufficient category with 10 students each in the excellent category and 2 students in the sufficient category with 40% and 8% respectively. Based on these results, eating the level of problem solving of students is categorized as good, this is in accordance with the results of

research conducted by Maksum which states that the citizen project model can improve participatory skills specifically on indicators of problem solving skills (Maksum, 2015).

Indikator of Communication Skills

This indicator of communication difficulties gets an average score of 4.21, so students on this indicator fit the overall category very well. Below is a distribution of data on frequency distribution and categories for details of competency assessments.

Table 4. Distribution Frequency Percentage of indicators of communication skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2,61-3,40	1	4,0	4,0	4,0
	3,41-4,20	12	48,0	48,0	52,0
	4,21-5,00	12	48,0	48,0	100,0
	Total	25	100,0	100,0	

Based on the distribution table for the conversation ability indicators of 25 students, 12 students depend on the good category and also 12 students are categorized very well with a percentage of 48%. Based on the distribution table for indicators of communication skills from 25 students, 12 students were in the good category and also 12 students in the excellent category with a percentage of 48% and the remaining 1 student was in the sufficient category with a percentage of 4%. Based on the results, the level of participation communicated was very good, according to the results of research conducted by Maksum, which agreed that students who get project models can communicate and work well together and help students who use good conventional models (Sopianingsih, 2016).

Indikator of Collaborative Skill

This collaborative skill indicator gets an average score of 4.08, so the students in this indicator are in the overall good category. Below is the distribution of data on frequency distribution of percentages and categories for indicators of skill collaboration in detail.

Table 5. Frequency of Distribution Percentage of indicators of collaborative skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2,61-3,40	4	16,0	16,0	16,0
	3,41-4,20	10	40,0	40,0	56,0
	4,21-5,00	11	44,0	44,0	100,0
	Total	25	100,0	100,0	

Based on the distribution table for the collaborative ability indicator of 25 students, 11 students depend on the Very good category and 10 students are categorized well with 44% and 40% respectively. And the remaining 4 students are in the sufficient category with a percentage of 16%. Based on these results, the level of student collaboration skills is categorized as good, this is in accordance with the results of a study conducted by Sopianingsih which explains citizen rpoejct models can increase collaboration because students learn citizen coopertive learning projects that can help students demanded to help their groups together in fostering an atmosphere of collaborative learning in personal relationships each other needs (Luqman, 2017; Yusuf et al., 2020).

Indicator of Creativity Skills

This indicator of creativity skills gets an average value of 3.99, so the students in this indicator are in the overall good category. Below is the distribution of data about frequency distribution of percentages and categories for indicators of creativity skills in detail.

Table 6. Frequency of Distribution Percentage of indicators of creativity skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2,61-3,40	1	4,0	4,0	4,0
	3,41-4,20	16	64,0	64,0	68,0
	4,21-5,00	8	32,0	32,0	100,0
	Total	25	100,0	100,0	

Based on the distribution table for creativity ability indicators from 25 students, 16 students are based on good categories and 8 students are categorized very well with 64% and 32% respectively. And the remaining 1 student is in the sufficient category with a percentage of 4%. Based on these results, the level of communication skills of students is categorized as good, this is in accordance with the results of research conducted by Luqman which states that citizen project models can improve creative student skills in addition to improving students' thinking skills (Mulyoto, 2017; Fajri et al., 2020).

Indikator of Innovation skills

This indicator of innovation skills gets an average value of 4.13, so the students in this indicator are in the overall good category. Below is the distribution of data about the frequency distribution of percentages and categories for indicators of innovating skills in detail.

Table 7. Frequency of Distribution Percentage of indicators of innovation skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3,41-4,20	15	60,0	60,0	60,0
	4,21-5,00	10	40,0	40,0	100,0
	Total	25	100,0	100,0	

Based on the distribution table for innovating competency indicators from 25 students, 16 students depend on good categories and 8 students are categorized very well with 64% and 32% respectively. And the remaining 1 student is in the sufficient category with a percentage of 4%. Based on the results, the level of communication skills of students is categorized as good, this is in accordance with the results of research conducted by Mulyoto which states the project model of citizens who can learn the potential that can develop the potential and needs of students who are learning, working together, helping, confident and able to socialize many people [26] In this model the students make a portfolio for their presentation material on the results of the research they have done. In the process of making a portfolio, students are required to make the best that can be done by people who look attractive and interested.

CONCLUSION

The results showed that the application of citizen project models can 21st Century Skills depending on the good category of 56% and the excellent category of 32%. Furthermore, learning and innovation skills consisting of critical skills indicators gained 56% value, 64% problem solving, 48% speaking, 44% collaboration, 64% creativity and 60% innovation.

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