



Learning Methods and Learning Media of Ecological Citizenship Based Civic and Pancasila Education with Society 5.0 Perspective

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Abstract. This article aims to reveal the views of teachers and students on the subject of Pancasila and Citizenship Education (Civic Education) in junior high schools regarding the use of learning methods and media to instill ecological competence in the perspective of society 5.0. This research uses a quantitative descriptive method. The research location is in 14 public junior high schools in the city of Madiun, East Java. The sample was chosen randomly, with a total sample of 112 respondents consisting of teachers and students in various junior high schools in Madiun City. The data collection technique used in this study is through a questionnaire that has been tested for its validity and reliability. From the data analysis and collection that has been carried out, the following conclusions can be drawn (1) There are differences in the data on the perception of citizenship education learning from the teacher's and student's entries regarding the material and learning methods. (2) The methods and media currently used by teachers are still not optimal in giving students opportunities to discuss Civics issues. (3) The media and learning methods used by the teacher are also not optimal in motivating students to be able to solve environmental problems. (4) The instructional media used by the teacher for students still does not provide opportunities to participate actively, ask questions, respond, express opinions and exchange ideas (5) There are still 23% of students who fall into the Antiecolological category and 65% mid-ecological.

Keywords: Civics Education · Learning Media · Learning Methods

1 Introduction

Indonesia is a country that is rich in natural wealth, both forests, mountains, seas, oceans and natural wealth of mines. Over the past decade, Indonesia has been plagued by natural disasters, be it floods, landslides, forest fires, droughts due to the long dry season. The capital city Jakarta is also very often a victim of natural disasters, for example, severe floods like what happened some time ago. The many natural disasters that have befallen Indonesia have led to many assumptions, one of which is that the quality of Indonesia's

environment is far from good. The deforestation of forest areas which are buffer zones for urban areas, the large number of forest areas which have been changed for plantation lands, is considered by many to be the root cause of natural disasters everywhere.

The forest area that is decreasing, people tend to take advantage of it by planting annual crops rather than annual crops, because they are considered to have high economic value. However, the impact is that forests become denuded and water absorption is reduced. In addition, the way land use by the community tends to have a negative impact on land fertility. And landslides are one of the disaster threats that occur as a result of land damage and the amount of run off on the soil surface. One of the reasons is that forest fires are a phenomenon that often occurs in Indonesia [1] which affect both local and global regions. Cases of forest fires are not new to the people of Indonesia, because forest fires in Kalimantan have been around since the 17 th century however, in 1980 they experienced an increase in intensity, especially in Sumatra and Kalimantan. The impact of forest fires that is most prominent is the presence of smog which disrupts health and transportation systems both air, sea and land. Not only smog, the most prominent impact also occurs in high economic losses [2].

In a smaller spectrum in the city of Madiun, for example, environmental problems are more focused on the habits/character of the community, especially school students. Things that can be seen include the habit of littering, polluting the environment, using materials/equipment that are not environmentally friendly, and there is a tendency to be "indifferent" to environmental damage. In the first school students, for example, during the observation it was found that there were good habits that were carried out at school (such as throwing garbage in its place, caring for trees and plants, etc.) but when they were in the community, the habits that existed at the school were not carried over. The results of interviews with several students found that on average positive habits related to the environment were only implemented by students during school hours or when they were in the school environment, after arriving home positive habits related to the environment had not been implemented properly. After investigating, this happened because of strict school regulations related to environmental cleanliness because schools in Madiun participated in the Adiwiyata school competition (a school healthy environment competition held by the Ministry of Environment).

With the inclusion of environmental protection in the constitution, efforts to protect it become easier, and it may be effective to see the real impact of implementing this environment. However, if it is not used properly and carefully, the Green Constitution will actually give rise to anthropocentrism or the separation of human morality from the environment. Because with a model of protection through regulations such as the Green Constitution, citizens only see that it is sufficient to do whatever is ordered by law, and is not accompanied by full awareness and loyalty to the environment. The impact, as revealed by Dobson in his research in England, is that humans will always look for loopholes from regulations, if there are loopholes then the regulations will be violated and environmental sustainability will again be ignored, because most importantly they will not receive punishment [3]. For this reason, Dobson suggests the need for the role of education to provide reinforcement of various environmental regulations that are made, so as to bring out the character/disposition of citizens regarding love for the environment.

Because environmental problems are so complex and multidimensional, which are related to various aspects such as politics, law, technology, one way that is considered appropriate to solve this problem is through education [4–7]. Specifically Citizenship education is a field of study that is Multifaceted with cross-scientific contexts [8] with the object of study on the concept of Political Democracy for the rights and obligations of citizens which are expected to be able to bring up civic reasoning (Civic Knowledge), Citizenship attitudes (Civic Disposition), civic skills, civic commitment and civic competence [8]. Therefore the object of study of Citizenship Education is currently becoming widespread, and can be addressed as civics education, political education, moral values education, national character education, law education and human rights depending on which points are used to initiate the study [9].

When Citizenship Education is related to citizens' problems regarding the environment, the concept of protection can be interpreted as a form of political participation of citizens to the government in relation to environmental policy [10–12]. Apart from that, citizenship education can also instill and teach real practices/actions from citizens to overcome environmental problems [13, 14]. So that aspects of civic reasoning (Civic Knowledge), Citizenship attitudes (Civic Disposition), Citizenship Skills (Civic Skills), Citizenship Commitment (Civic Commitment) and Citizenship Capability (Civic Competence) regarding the environment can also be formed through this subject.

From various studies it is known that there are several main things that cause environmental damage. First, the ethical problem of anthropocentrism [6, 15, 16]. Second, there are legal regulations and political products. Third Modernization and progress of science and technology. Because environmental problems are so complex and multidimensional, one way that is considered appropriate to solve this problem is through education. Especially Citizenship education through the concept of Ecological citizenship, environmental citizenship to sustainable citizenship [3].

For this reason, teachers need to think about the characteristics of their students so that learning outcomes can be optimally successful. Considering that we are teaching the millennial generation and the world is about to enter the Society 5.0 era, environmental learning needs to move towards digitalization. From several studies [17–19] concluded that technology can assist education in teach character. So that in cultivating attitudes and values of concern for the environment, technology can be an up-to-date and efficient solution because it does not require face-to-face meetings. But in its application, sometimes modern learning according to the teacher will feel traditional for students, considering they come from different generations. For this reason, this research will reveal the views of teachers and students on the use of methods and media in the subject of Pancasila and Citizenship Education (Civic Education) within the framework of the perspective of society 5.0, especially for the learning objective of planting ecological competence in students.

2 Methodology

This study uses a quantitative approach using a quantitative research approach, as stated that the quantitative research method is defined as a research method based on the philosophy of positivism, used to research on certain populations or samples, data collection using research instruments, data analysis quantitative/statistical in nature, with

the aim of submitting predetermined hypotension. This quantitative approach is used by researchers to measure the level of description of Citizenship Education learning models and media from the perspective of teachers and students. The research location is in 14 public junior high schools in Madiun City, East Java. The sample was chosen randomly, with a total sample of 112 respondents consisting of teachers and students in various junior high schools in Madiun City. The data collection technique used in this study is through a questionnaire that has been tested for its validity and reliability. The instrument is shared in person and online (google form).

3 Research Result

3.1 Description of the Application of Models and Media the Ideal Citizenship Education Learning from the Teacher's Perspective

From interviews with representatives of public junior high schools Civic Education teachers, it is known that in terms of delivering material and grades during online learning there is no difference, everything is delivered as it should and as usual when face-to-face in class, in accordance with existing competencies and can still relate material with case examples and happenings around. However, in terms of teaching and learning media, Civic Education during the pandemic had various difficulties, starting from the learning media used, then variations of learning models to the assessment instruments. Not to mention if there are technical problems regarding internet network problems or power outages, practically online learning cannot be carried out smoothly. Indeed, occasionally we hold virtual meetings using Zoom or Google meets, it's just that many students go in and out (suddenly disappear due to network problems) so they have to turn off the camera and in the end no student activity is monitored. Even if there are no technical obstacles such as network and electricity, the limitations of online interaction with students make the learning methods that are applied limited. So that there are not many choices of learning models used by teachers, because basically every existing learning model is not specifically designed for online learning. Even so, the teacher still tries to provide a variety of learning models, and the teacher hopes that there is a model that is easy to apply and can make learning more fun.

As for the results of the percentage description of the application of the Civics learning method at the initial measurement according to the indicators, namely 1) the suitability of the method with the learning material; 2) the use of methods that increase student activity and motivation, and 3) the use of various methods are as follows:

Referring to the Table 1, the results of student respondents' calculations on the Civics learning method show that it is rare and has the highest average score of 63.2%. This means that when doing online learning the teacher realizes that students are not given the opportunity to be active in class. This is due to the limitations of the media used, when using web-based media and all students comment that the teacher feels overwhelmed to respond to them one by one. Meanwhile, if using Zoom or Google meets, not all students have sufficient opportunities to comment.

As for the results of the percentage description of the application of Civics learning media in the initial measurement according to the indicators, namely 1) the use of varied media; 2) suitability of the media with the objectives and learning materials; 3) the use

Table 1. An overview of the Teacher's Perspective Civics Learning Method

No	Indicator	Results (%)				
		Always	Often	Sometimes	Seldom	Never
1	Students are invited to have group discussions and present the results of discussions in class regarding Civics issues	–	49.6	50.4		
2	The learning method used by the teacher motivates students in solving problems	–	48.6	35.5	15.9	
3	Students are given the opportunity to participate actively, ask questions, respond, express opinions and exchange ideas	52.4	10.8	36.8		
4	Civics learning methods used by teachers vary (besides lectures and questions and answers, they also use discussion, debate, field research, <i>project citizen</i> , etc.)	–	57.3	42.7		
		52.4	41,575	41.35	15.9	

of media that benefits students; and 4) student participation in the use of instructional media is as follows (Table 2).

3.2 Description of the Application of Models and Media the Ideal Citizenship Education Learning from the Teacher's Perspective

As for the results of the percentage description of the application of the Civics learning method at the initial measurement according to the indicators, namely 1) the suitability of the method with the learning material; 2) the use of methods that increase student activity and motivation, and 3) the use of various methods are as follows (Table 3).

As a result of the limited methods that teachers can apply for online learning, the class situation becomes unpleasant. If you imagine starting from waking up then going to online school until then sleeping again students are in the same location (at home) so maybe this also makes students less happy when learning online. Due to the pandemic conditions, teachers are also unable to give assignments for field observations, so it is felt that learning does not touch the affective domain of students, especially when it is related to the environment. There are a lot of environmental problems around, but if you don't see it right away, it feels like it doesn't develop student character.

3.3 Analysis of Student Ecology Citizenship Competency Description

During field surveys and interviews with teachers, the fact was revealed that when the Covid-19 pandemic and learning switched to full online, teachers prioritized cognitive assessment compared to attitude. Cognitive assessment is prioritized because according

Table 2. Civic Learning Media

No	Indicator	Results (%)				
		Always	Often	Sometimes	Seldom	Never
1	The media used by the teacher is in the form of interesting and fun multimedia	56.7	33.6	9.7	–	
2	The media used by the teacher uses the latest technology and is not old school	39.3	30.4	20.2	–	10.1
3	Civics Learning Media in accordance with learning objectives (for example so that students can understand politics, Pancasila, express opinions, use video recordings, etc.)	74.7	25.3	–		
4	Civics learning media is in accordance with the material being studied	52.3	47.7	–		
5	The use of Civics learning media makes it easier for you to understand the subject matter	-	49.2	34.6	16.2	
6	Civics learning increases student learning motivation	46.9	52.4	0.7		
7	Involving students in procuring effective and innovative media (eg using YouTube/social media for learning media)	-	57.9	42.1		
Average		53.98	42.35714	9:46 p.m	16.2	10.1

to the teacher, measuring attitudes when online learning is difficult, especially in terms of students' attitudes towards sustainability. In addition, teachers do not have measuring tools and indicators for measuring attitudes that are appropriate for assessing students'

Table 3. Description of Civics Learning Methods from The Student's Perspective

No	Indicator	Results (%)				
		Always	Often	Sometimes	Seldom	Never
1	Students are invited to have group discussions and present the results of discussions in class regarding Civics issues	–	–	28.4	42.3	29.3
2	The learning method used by the teacher motivates students in solving problems	-	-	35.5	52.4	12.1
3	Students are given the opportunity to participate actively, ask questions, respond, express opinions and exchange ideas	–	–	36.8	48.6	14.6
4	Civics learning methods used by teachers vary (besides lectures and questions and answers, they also use discussion, debate, field research, <i>project citizen</i> , etc.)	–	–	23.7	49.6	26.7
Average		0	0	31.1	48.2	20.7

attitudes. Of the various indicators regarding attitudes to measure environmental awareness, there are none that are specifically aimed at Civics subjects and for online learning needs.

From this, the researcher tries to continue the results of the field survey by conducting a literature review, in order to formulate the indicators needed to develop political participation instruments. From the results of this study, it turned out that the researchers found 2 instruments for measuring environmental awareness that have been widely used in the world, including the measurement with the NEP (New Environmental Paradigm) scale, an instrument developed by Dunlap and van Liere in 1978, and updated by him in 1978. 2000. Since the first time this instrument was created, it has been used by more

than 100 ecological researchers in the world, to measure student attitudes in terms of ecology [20]. In this instrument students' attitudes are divided into three namely antiecological, mid-ecological and pro-ecological, and consist of 15 question items using a Likert scale [21].

NEP statements are divided into 2 based on their nature, namely statements with positive and negative values [22]. The two properties of the NEP statement are indicators for determining the level of attitude an individual has towards the environment [23]. Attitude level based on NEP is divided into 3 categories, namely antiecological, mid-ecological and pro-ecological. If the NEP score is in the range of 15–45 or 23%–52%, then the student's attitude category is antiecological. If the NEP score is in the range of 46–60 or 53%–72%, then the student's attitude category is mid-ecological. If the NEP score is in the range of 61–75 or 73% -100%, then the student's attitude category is proecological [20]. The item consists of 5 indicators: Limits of Earth Coverage, Anti-Anthropocentrism, Fragile Natural Balance, Rejection, Possibility of Environmental Crisis. There are several advantages in the NEP instrument, including the fact that this instrument has been trusted and used by various researchers in the world, at least according to the data, there have been 100 studies using this instrument. So that this instrument has been trusted and tested for its reliability to measure attitudes towards the environment.

This instrument was given randomly to students in class VIII public junior high schools in Madiun City with the help of the Madiun City Middle School, and was obtained from the 112 participating respondents who obtained the following attitude description:

Table 4 shows the results of student respondents' calculations of students' attitudes towards environmental sustainability, with the result that there were 23% of students out of a total of 230 respondents showing an anti-environmental attitude, while the other 60.5% showed a Mid Ecological attitude, they sometimes preserve the environment but in at certain times they actually destroy the environment because they are more concerned with other interests, what is relieved is that there are still 16.7% of students who are committed to protecting and preserving the environment.

Table 4. Scale Of Students' Attitudes Towards The Environment

No	Attitudes of students towards the environment	Percentage
1	Antiecological (Considering environmental sustainability is not more important than other interests)	23%
2	mid-ecological (Sometimes preserving but also sometimes destroying the environment)	60.5%
3	pro-ecological (Always have a commitment to protect the environment)	16.7%
	Total	100%

4 Conclusion

From the results of this initial study, the researcher has several findings which are considered to be the cause of the low percentage of students who are committed to protecting the environment. Some of these findings are:

There are differences in the data on the perception of citizenship education learning from the contents of teachers and students regarding learning materials and methods. The average on the teacher's entry shows that the teacher's performance in providing material and using methods is in a good range, namely in the section (Always and often) but this is reversed when compared to the questionnaire filled in by students, which assesses learning performance mostly in (sometimes and rarely). This difference shows that even though the teacher thinks that his performance in teaching is good, students think that this is not enough. In this case, it means that the teacher is not able to provide learning designs (both methods, media and material) according to what students want, besides that this also shows that the items of quality of learning from the perspective of teachers and students have drastic differences. Moreover, in an excerpt from an interview with one of the civic education teachers at Madiun City Middle School, there was a person who revealed that Civics learning during the *Pademi*, which could only be done online, emphasized more on the knowledge aspect alone. In elearning students are stuffed with materials and practice questions which are quite a lot in number, and are mandatory for students to complete. Of course this condition makes students feel learning becomes less fun. Even though the key to success in learning is fun, without feeling happy students will not enjoy the learning process and only think learning is something that is not important [24].

The methods and media currently used by teachers are still not optimal in giving students opportunities to discuss Civics issues. This can be seen from the student questionnaire which shows 29.3% of students feel they have never been given the opportunity to discuss in class. Even though one of the important factors in the process of growing students' environmental awareness is students' activeness and critical power, this is reinforced by research from Wolf et al. [25] that the factors that influence students' views on environmental sustainability are communitarian, systemic, skeptical, and economist. From these factors Communitarian, systemic and economist are considered to produce thoughts about environmental sustainability holistically, so that these factors can be a reference for civics education learning both socio-culturally and curricularly that it is necessary to instill communitarian, systemic and economic factors to preserve the environment. To cultivate the three factors that influence environmental sustainability (Communitarian, systemic and economist), it is necessary to educate environmental citizenship with the principles of sustainability or sustainability [26]. The hope is that Citizenship Education is able to educate citizens to be active and wise in using and taking advantage of technological advances. This understanding of sustainability teaches students that all existing technological products need to be considered for their impact on nature. The implication of learning citizenship education needs to include the concept of Active Citizen in learning ecological citizenship.

The media and learning methods used by teachers are also not optimal in motivating students to be able to solve environmental problems, this is shown that the highest percentage is in the rare category, namely 52.4%. Moreover, this is strengthened by the

teacher's habit of delivering learning material that is not related to the conditions and cases that are around him. This is actually very important because civics education should be able to shape the real behavior of citizens to overcome the problems around them [13]. Moreover, environmental problems are related to various aspects such as politics, law, technology, and education, so one of the suitable subjects is civics education. In the citizenship paradigm, the concept of protection is often only interpreted as a form of citizen political participation in the government in relation to environmental [10]. Even though there are research results that reveal the role of motivation in growing citizens' concern for the environment as expressed [27] which uses the Civic Ecology Practice project model which combines practice and critical discussion about environmental sustainability. After implementing the model on a small scale, then other people who knew about it were motivated to participate and 2 months later more than 2000 people participated in this activity. This is proof that the method provided by the teacher needs to accommodate practice so that students feel happy and not bored in learning. This is reinforced by the statistics of 49.6% of students revealing that the method used by the teacher is less varied.

The learning media used by teachers for students still does not provide opportunities for active participation, asking questions, responding, expressing opinions and exchanging ideas, this can be seen from the contents of the student questionnaire which shows a percentage of 48% in the rare category. This is not quite right because research from [28] Morgan explained that ideal learning for the millennial generation has criteria: Active involvement of students, security, having the opportunity to speak, gaining interesting experiences during the learning process [29]. So the implication of this is that teachers must use learning methods and media that are able to provide opportunities for students to be active and have fun experiences. The implication of this research is that as teachers, we must help all students to analyze and evaluate each media message for text, context, and impact to produce more knowledgeable, creative, and cooperative citizens.

There are still 23% of students who fall into the Antiecolological category (Considering environmental sustainability is not more important than other interests) and mid-ecological 65% (Sometimes preserving but also sometimes destroying the environment).

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