

# Eco-Literacy Citizenship Education Materials Based on Cultural Value: Research and Development Study at Universitas Negeri Medan

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## ABSTRACT

*This study aims to develop and validate Eco-Literacy Citizenship Education materials based on cultural value. This teaching material was developed in the Citizenship Education (PKn) subject in Higher Education. The development of teaching materials aims to strengthen citizenship competence, especially students' responsible attitudes towards various global issues such as the environment. The teaching materials developed integrate the principles of environmental awareness and the values of Indonesian local wisdom. The method used is research and development (R&D) by Borg and Gall (1983). Data collection techniques through questionnaires and interviews. The subjects in this study were adjusted to the stages of the research. For introduction, the respondents were 30 Universitas Negeri Medan's students from the three of study programs, namely Elementary School Teacher Education, Computer Science Engineering Education and Pancasila and Citizenship Education. At the planning stage and initial product development, the subjects of the research were 4 lecturers of Citizenship Education courses. While at the stage of field testing, the subjects of the research were 2 experts on the subject of Citizenship Education. The results of the study indicate that Eco-literacy Citizenship Education Materials based on cultural value are needed to strengthen student citizenship competencies. Expert validation results get an average score of 86.50. These results indicate that the teaching materials developed are categorized as suitable for use in the next test.*

## KEYWORDS

*Teaching Materials; Citizenship education; Eco-literacy; Culture value.*

## INTRODUCTION

Citizenship Education is a learning program whose mission is to form good, intelligent and responsible citizens. Citizenship education according to (Loberg, 2022) is an effort. Promote civic engagement for a more just society both socially and economically. This is in line with what was stated by (Chong & Pao, 2020) that Citizenship Education teaches about citizen identity, rights and obligations and involvement in society. According to (Myers, 2020) that civic education encourages social transformation through learning that can involve students participating in various problems in society. These various goals can be achieved if civic education in higher education can provide a learning experience for students. However, in reality, civic education in higher education still encounters several challenges.

First, Civic Education Learning in Higher Education is still dominated by strengthening knowledge (civic knowledge), and paying less attention to aspects of attitude (civic

knowledge) and skills (civic skills). This is in line with the results of research conducted by (Dharma, Sapriya, Winataputra, & Komalasari, 2018) which found that Citizenship Education Learning in Higher Education is still carried out verbally so that it has not touched the strengthening of citizens' attitudes and skills. The results also state that Citizenship Education not only strengthens citizens' knowledge, but also helps students gain new experiences to be actively involved in responding to global issues, including environmental issues (Dharma, Sapriya, Winataputra, & Komalasari, 2018). Furthermore, according to (Hidayah, Ulfah, & Suyitno, 2019) that Civic Education learning in Higher Education must provide learning experiences to students through various learning approaches such as contextual approaches, constructivism and open-ended. Second, the material for Citizenship Education in Higher Education has not integrated the values of local wisdom.

Second, the goal of Citizenship Education in Higher Education does not accommodate the formation of student awareness of various global issues. An increasingly global life encourages the occurrence of various global problems. This is in line with what was stated by Moland (2016) who stated that an increasingly global life encourages various global issues such as issues of human rights, multiculturalism and cross-cultural tolerance. The civics education curriculum in Indonesia, especially universities, has not provided space for students to strengthen these goals. This is in line with the results of research conducted by Dharma (2020) that Civics courses in Higher Education have not accommodated strengthening the global awareness of students, especially in the city of Medan. The importance of strengthening student awareness of global issues will have an impact on a better, fairer and more tolerant life at the local, national and global levels. Some global problems such as the environment must be the responsibility of all parties, including students. This need is in line with what was stated by Chong (2015) which explains that Citizenship Education has entered a new era that must prepare citizens for various global challenges such as ecological citizenship, gender, and economics.

Third, the material for Citizenship Education in Higher Education has not touched the strengthening of local wisdom values. Citizenship Education Materials in Higher Education in Indonesia still tend to teach the relationship between citizens and the state, without paying attention to the values of Indonesian local wisdom. This is in line with what was stated by. This is in line with what was stated by (Sujana, 2022) that the material for Citizenship Education (PKn) in Higher Education is poor in the values of local wisdom. Whereas the essence of Citizenship Education is not only to prepare academically intelligent students, but also citizens who are successful in the social life of the community and uphold their cultural values.

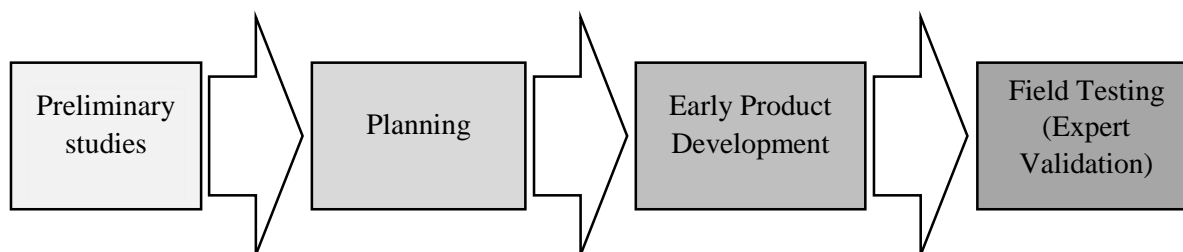
From the various problems above, it is necessary to strengthen the identity of students through the development of ecoliteracy teaching materials based on cultural values. The teaching materials developed transmit the values of local wisdom to strengthen students' responsibility for various global issues including environmental issues. The teaching materials developed are expected to be a pedagogical feature to encourage students to have various skills and values that need to be realized to be fully involved in various global problems.

## **RESEARCH METHODS**

This study aims to produce teaching materials for Citizenship Education based on cultural values ecoliteracy. To achieve this goal, the method used is a mixed research method where each step of the research uses a research and development (R&D) approach by adopting the steps of Borg and Gall (1983).

### **Research Procedure and Design**

The procedure and research design used was based on the opinion of Borg and Gall (1983) through ten stages. Because this research only produces a model and tests the validity of the developed model, the research stages consist of 4 stages, namely (1) initial information collection/preliminary study; (2) planning; (3) developing the initial product; (4) early stage field testing (expert validity). The four stages are described as follows:



**Figure 1.** Research Steps

### **Research subject**

This research was conducted at the State University of Medan (Unimed), North Sumatra, Indonesia. The subjects in this study were adjusted to the stages of the research. For the preliminary study, the respondents were 30 Unimed students from various 3 study programs, namely Elementary School Teacher Education, Computer Science Engineering Education and Pancasila and Citizenship Education. At the planning stage and initial product development, the research subjects were 4 lecturers of Citizenship Education courses. While at the stage of field testing, the subjects of the research were 2 experts on the subject of Citizenship Education.

### **Data Collection Tool**

Qualitative data were collected through interviews. Interviews were used to collect information at the preliminary study, planning and product development stages. While quantitative data were collected through questionnaires. This data is needed to determine student responses to Civics teaching materials that have been used so far. Questionnaires are also used to determine the assessment made by the Civic Education material expert on the teaching materials that have been developed.

### **Data analysis technique**

The data analysis technique is adjusted to the data collection tool used. Where in qualitative data, data analysis uses 5 stages taken from Milles and Huberman (1991) namely data collection, reduction, presentation, and drawing conclusions. While for quantitative data, data collection uses presentations that are guided by the opinion of Cresswell (2012).

## **RESULTS AND DISCUSSION**

Preliminary Study (analysis of the need for the development of Cultural Value-Based Ecoliteracy Education Teaching Materials) to obtain information related to the need for the development of cultural values-based Ecoliteracy Citizenship Education teaching materials, the researchers distributed questionnaires to 30 Medan State University students. The questionnaires distributed contained 1) students' views on Civics teaching materials that had been used so far; 2) materials on teaching materials; and 3) the purpose of developing teaching materials. The results of the questionnaire are presented in the table below:

**Table 1.** The Students' Responds about Preliminary Study

No	The Assessed Component	Very Good	Good	Poor	Very Poor
		%	%	%	%
1.	I have teaching materials used in Civic Education (PKn) lectures	65	20	15	0
2.	The lecturer required me to have teaching materials in Civic courses (PKn).	40	25	35	0
3.	The Civic Education Teaching Materials that I have are interesting to read	30	10	50	10
4.	The material presented in the teaching materials is in accordance with the objectives of the Civics course	60	20	5	15
5.	The material presented in the teaching materials is easy to understand	25	20	35	20
6.	The material presented in the teaching materials is very contextual or up to date	40	20	25	15
7.	The material presented in the teaching materials encourages students to think critically	20	25	40	15
8.	Teaching materials are equipped with various evaluations that measure the achievement of student competencies.	25	30	35	10
9.	Teaching materials are equipped with various assignments.	40	20	10	30
10.	Teaching materials encourage students to work collaboratively,	10	15	40	35
11.	Civics teaching materials present a variety of contextual problems	5	20	35	40
12.	Civics Teaching Materials help students strengthen civic competence in the aspect of knowledge (civic knowledge)	60	20	20	0
13.	Civics Teaching Materials help students strengthen civic competence in the aspect of attitude (civic disposition)	20	15	45	20
14.	Civics Teaching Materials help students strengthen civic competence in the aspect of skills (civic skills)	20	20	40	0
15.	Through Civics Teaching Materials, students are taught various national and global citizenship issues.	20	15	20	30
16.	Through the use of teaching materials I can understand the material so easily.	50	30	10	0
17.	It is important to me that Civics Teaching Materials teach various cultural values.	30	25	25	10
18.	Civics Teaching Materials explore various Indonesian cultural values	15	10	50	30
19.	Civics Teaching Materials teach how to respect cultural differences.	30	10	45	10
20.	Civics teaching materials that I use are very interesting	20	20	50	10

From the table above, it can be seen that in general the Civics Education teaching materials used by students so far have not supported the achievement of strengthening competencies, both knowledge, attitudes and skills. This can be seen from the overall

answers of respondents who stated that 1) Civics Teaching Materials help students strengthen civic competence in the aspect of knowledge (civic knowledge) with 60% of the answers strongly agree; 2) help strengthen attitudes with answers 45% of students disagree; and 3) help strengthen skills with answers 40% of students disagree. This answer is supported by the opinion of 50% of students who stated that the Civics Education Teaching materials (PKn) were not interesting to read, not easy to understand (35%); does not encourage students to think critically (40%); does not encourage students to work collaboratively (40%), and does not present contextual issues (40%).

In addition, most of the students answered that the current Civics teaching materials did not touch the aspects of strengthening student cultural literacy. Cultural literacy is an effort to maintain and preserve culture which is shown through various behaviors of citizens. According to the Ministry of Education and Culture, (2017) that cultural literacy is the ability to understand and behave towards Indonesian culture as a nation's identity which is manifested through various behaviors and actions. In this regard, Pratiwi and Asyarotin (2019) reveal that cultural literacy is a part to be owned by students as a form of protecting, loving and preserving the nation's cultural values. This effort is very important amid the onslaught of various technological, information and communication advances that affect the shift in cultural values in the millennial generation.

In this regard, Citizenship Education is a philosophical, socio-political and psychopedagogical subject that has a mission in shaping the character and civilization of the nation to educate the nation's life and as an effort to make citizens democratic and responsible (Winataputra & Budimansyah, 2007). . Achieving this goal must of course be supported by learning that provides a learning experience for students. One way to do this is through strengthening cultural values. However, in reality, Civic Education teaching materials have not explored this goal. This can be seen from the majority of students who think that Civics teaching materials that have been used so far have not explored various cultural values (50%), have not taught how to respect cultural values (45%) and do not touch on global issues-based learning (30%) . From these initial studies, it is necessary to develop teaching materials that can accelerate the achievement of knowledge, attitudes and skills so as to encourage students' responsibility towards various global issues, including environmental issues.

The Validity of Teaching Materials for Citizenship Education Teaching Materials Based on Cultural Values Ecoliteracy according to Lecturers and Experts. The results of the preliminary study above indicate the importance of developing teaching materials that can provide learning experiences for students, especially to strengthen responsibility for various global issues, including the environment. Ecoliteracy is a concept that describes it. According to Keraf in (Desfandi et al., 2017) that ecoliteracy shows a responsible attitude of citizens which is indicated by high awareness of the environment. This goal can be instilled through learning that touches on aspects of strengthening knowledge, attitudes and skills towards environmental problems. The learning in question can be implemented through Citizenship Education. Because civic education is philosophically aimed at strengthening the character of students, as is the responsibility of citizens to the environment.

To achieve the above objectives, one of the strategies that can be done is through the development of ecoliteracy-based Civics teaching materials. This Citizenship Education teaching material was developed with the aim of building student responsibility towards student responsibility for various global problems including the environment. The following are the results of research from the stages of developing ecoliteracy-based Citizenship Education teaching materials.

**Table 2.** Stages of Development of Ecoliteracy-Based Citizenship Education Teaching Materials

No	Steps	Events
1	Study Preliminary	<ul style="list-style-type: none"> <li>At this stage the researcher conducts a literature study as well as a field study related to the need for developing teaching materials</li> <li>At this stage the researchers also asked for student responses to Civics teaching materials that have been used so far with indicators: The purpose of developing teaching materials, benefits, materials presented, usefulness, integration of global issues including the environment, as well as strengthening awareness of cultural differences.</li> <li>The results of the questionnaire on the preliminary study show that the Civics teaching materials that have been used so far have not fully strengthened civic competence, especially in the aspects of attitudes and skills.</li> </ul>
2	Planning	<ul style="list-style-type: none"> <li>At this stage, researchers identify and formulate learning objectives, graduate achievements, course outcomes and select relevant materials.</li> <li>At the planning stage, the researcher held a discussion with the lecturer in Citizenship Education at the Medan State University to obtain data related to the need for ecoliteracy teaching materials based on cultural values..</li> </ul>
3	Development	<ul style="list-style-type: none"> <li>At this stage, researchers develop eco-literacy teaching materials based on cultural values.</li> <li>The systematics of teaching materials consist of:</li> <li>Cover, Identity of Teaching Materials, Preface, Table of Contents, Chapter 1 Urgency of Civics in PT Chapter 2 Global Citizenship Education, Chapter 3 Indonesian Local Wisdom Values, Chapter 4 Global Citizenship Issues, Chapter 5 Environmental Issues and Student Responsibilities.</li> <li>The teaching materials that have been developed are then validated by lecturers and experts.</li> </ul>

*Source: Primary Data Processed*

The teaching materials that were developed were then validated by lecturers who support Citizenship Education courses and experts. The validation results are described as follows:

**Table 3.** Assessment of Ecoliteracy Citizenship Education Teaching Materials Based on Cultural Values

Assessment Indicators	Assessment Points	Very Good	Good	Poor	Very Poor
		%	%	%	%
The suitability of the material with SK and KD	• Completeness of materials	60	30	10	0
	• Material depth	55	40	5	0
	• Material breadth	70	20	10	0
Material accuracy	• The suitability of the material with the objectives and learning outcomes	55	35	10	0
	• Accuracy of materials and concepts	40	20	10	10

	• Presenting citizenship issues	55	20	10	20
	• Materials are integrated with cultural values	40	60	0	0
Objectives of Development of Teaching Materials	• Interesting teaching materials	35	50	10	0
	• Linkage to goals	40	55	5	0
	• Encouraging participatory and collaborative	45	40	5	0

The table above shows that in general the teaching materials developed can be categorized as feasible or can be used. This can be seen from the aspects of the suitability of the material with SK and KD, the accuracy of the material, and the purpose of developing teaching materials. In the aspect of material suitability and Competency Standards, it shows that the completeness, depth and breadth of the material shows appropriate or usable results. Likewise in other aspects. From this assessment, it can be concluded that the teaching materials developed are feasible to use and in accordance with the needs of students and the learning objectives of Citizenship Education.

## CONCLUSION

This research is part of research and development that aims to produce teaching materials for Ecoliteracy Citizenship Education based on cultural values. This research was developed based on the aspect of the need to provide a learning experience for students through Citizenship Education courses. The stages of research and development carried out refer to Borg and Gall (1983) which are simplified into 3 stages, namely introduction, development and trial. The results of the study indicate that Cultural Value-Based Ecoliteracy Citizenship Education Teaching Materials are needed to strengthen student citizenship competencies. The results of the validation of civic education experts and lecturers show that the teaching materials are feasible to use.

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