Journal of Educational Sciences
Journal homepage: https://jes.ejournal.unri.ac.id/index.php/JES
P-ISSN 2581-1657
E-ISSN 2581-2203

Development of A Green Environment-Based Civic Obligation Module to Increase Students' Awareness of The Environment at Kepanjen National 1 Senior High School

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ARTICLE INFO

Article history:

Received: 24 Sept 2025
Revised: 13 Oct 2025
Accepted: 25 Oct 2025
Published online: 05 Nov 2025

Keywords:

Module,
Civic obligation,
Environment

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Article Doi:

https://doi.org/10.31258/jes.9.6.p.5647-5661

A B S T R A C T

The research purposes was conducted due to environmental issues such as extreme climate change, uncontrolled amounts of plastic waste, global warming, etc. The study focuses on developing products that have been tested for feasibility, practicality, and effectiveness in order to increase environmental awareness. The study used an analysis, design, development, implementation, and evaluation development model. The product testing location was at State Senior High School 1 Kepanjen. Data collection techniques included questionnaires and formative tests, namely pre-tests and post-tests. Data analysis techniques included descriptive statistical analysis, paired t-tests, and n-gain tests. The study results showed that: (1) the validation test results by subject matter experts, learning experts, media experts, and limited trials on potential users obtained a score of 82.2 with a pass rating; (2) the paired t-test results using the Wilcoxon test showed an increase in learning outcomes after treatment of 0.038; (3) The effectiveness of the product falls into the ineffective category with low and moderate n-gain test results; (4) The causes of the product's ineffectiveness are the number of meetings that are not proportional to the learning objectives, as well as the absence of assignments related to the environment.

1. Introduction

A module is a tool in an independent learning activity designed to help achieve agreed learning objectives (Anggereini, 2017). A module can also be described as a planned learning process based on learning objectives related to a specific topic, intended for use by students, and including guidelines for its use by teachers. A module is a self-contained learning unit containing instructions, plans, teaching materials, and learning objectives that students can use independently. Modules have now evolved to be displayed electronically or in digital format. Modules can present systematically organized information as learning materials for students through computers, laptops, CDs, and flash drives. Compared to printed modules,

electronic modules can be easily stored and used on multiple electronic devices (Zaharah and Susilowati, 2020).

The developed module is an electronic module on citizens' duties based on a green environment, which has the advantage of enhancing students' understanding and can display images, audio, video, and animations (Anggereini, 2017). The green environment-based civic obligation module is an electronic module containing material on civic duties interwoven with environmental education to support students in becoming environmentally aware and considering the impacts on the environment, thereby fostering a sense of environmental concern among students. Environmental awareness in the cognitive domain is related to knowledge and intellectual understanding of environmental concerns, while in the affective domain, it emphasizes attitudes, values, feelings, and the desire to act in ways that reflect environmental awareness (Pramiana, Yuliyanto, and Maharani, 2017).

The green environment-based civic obligation module was developed based on civic obligation material on environmental values in accordance with current environmental conditions. The green environment-based civic obligation module is a module that is expected to help improve students' understanding of their obligations as citizens in protecting the environment. Currently, many cases of environmental damage are encountered due to low human awareness. The United Nations Environment Programme (UNEP), as the authority responsible for inspiring, activating, and mobilizing the global community to develop policies on the environment and sustainable development, states that forest habitats covering more than 30% of the world's land area, which are home to 1.6 billion people, have decreased. UNEP explains that over the past 30 years, 420 million hectares of forest have been lost, with an additional 100 million hectares at risk of being lost.

Environmental damage is not limited to forest areas; it also includes events such as climate change, floods, acid rain, and global warming. These environmental damage events occur due to low human concern for the environment (Putri and Zenien, 2022). Additionally, the environmental issue currently being faced is marine debris, which consists of processed waste, manufactured waste, and waste intentionally discarded into coastal and marine environments. Marine debris affects nearly 700 species and approximately 8.4 million metric tons of plastic waste from land areas enter marine areas, leading to issues such as marine ecosystem degradation, reduced economic income from tourism, and the deterioration of marine landscapes. Human awareness of the environment is a significant factor influencing environmental degradation phenomena, as it is shaped by their knowledge of environmental issues and the efforts they undertake through environmentally conscious behaviors, which in turn impact environmental sustainability (Liu, Chang, and Chen, 2023). Human behavior that overexploits nature due to indifference toward the environment disrupts the natural balance (Pusparani and Miranto, 2021). Actions and behaviors that overexploit nature reflect a lack of awareness in preserving the environment (Rahman and Fitria, 2021).

The module discusses the obligations of citizens (civic duties) in national and state life, which will explain the implicit obligation to protect the environment. The obligations of citizens are something that must be carried out and cannot be neglected by citizens. Obligations are a consequence of rights, so the rights that a person has will have consequences related to their obligations to others (Prasetyo, Manik, and Riyanti, 2021). The rights and obligations of citizens are regulated in the 1945 Constitution, Articles 27-31. One of the rights of citizens is in Article 28H paragraph (1), which states that every person has the right to a good and healthy environment, so the consequence of this right is that citizens are obliged to strive to maintain the sustainability of the environment (Farahdiba et al., 2021).

The development of modules related to environmental education is based on several previous studies conducted by: (1) (Anggereini, 2017) on environmental education, (2) modules also developed by (Nurani, Ridlo, and Susilowati, 2014) for environmental education in science subjects (IPA), (3) the development of an e-learning module on environmental education to meet the requirements of the Adiwiyata program by incorporating environmental education content into the curriculum, syllabus, and lesson plans (Poerwantiningtyas, 2015), and (4) the development of a module on environmental pollution based on environmental worldview and environmental attitudes, which discusses environmental pollution topics with feasibility test results in terms of content, instructional material design, readability, and practicality of the product, with an average rating of "very feasible" at 94.6%, indicating that the product is suitable for educational use (Syamsussabri, Sueb, and Suhadi, 2019). The pilot testing location was at SMAN 1 Kepanjen, which is one of the National Level Adiwiyata Mandiri High Schools.

The green environment-based civic obligation module is a learning tool that aims to increase students' awareness of the environment used in Pancasila education. This module is still relatively new because previous studies have not developed an electronic civic obligation module based on the green environment. The module was chosen because it supports content in the form of videos, images, and audio on various platforms. The development of the green environment-based civic obligation module is expected to provide students with environmental knowledge so that they can put it into practice in the form of environmentally friendly behavior. Therefore, the objective of developing this product is to produce a learning product that has been tested for feasibility, practicality, and effectiveness so that it can be useful for increasing students' awareness of the environment.

2. Methodology

This study is a type of development research that uses the ADDIE (Analysis, Design, Development, Implementation, Evaluation) development model. The study focuses on developing a module product called the green environment-based civic obligation module to increase students' awareness of the environment, which was tested at Kepanjen 1 Public High School. Tests on the module include module feasibility tests by learning experts, material experts, and media experts who are all lecturers at the State University of Malang, practicality tests, and effectiveness tests

conducted by users, namely class X students at SMAN 1 Kepanjen. The data source consists of the results of filling out the questionnaire, as well as data from the pre-test and post-test test results. The experimental design used a pre-test and post-test single group design. The experiment was conducted on one experimental class that received treatment according to the following table 1.

Table 1. Research Design

Pre-Test	**Treatment**	**Post-Test**
(Y1)	(X)	(Y2)
Measurement of students' knowledge and attitudes regarding citizens' obligations towards the environment using a questionnaire and self-assessment sheet before treatment.	Treatment utilizing the student citizenship module as a learning resource.	Measurement of students' knowledge and attitudes regarding citizens' obligations towards the environment using a questionnaire and self-assessment sheet after treatment.

Data collection techniques used questionnaires for feasibility and practicality tests, as well as formative pre-tests and post-tests for effectiveness tests. Data analysis techniques use descriptive statistical data analysis to analyze the results of feasibility and practicality tests, as well as paired t-tests to analyze the results of product effectiveness. The questionnaire in question is a survey containing statements filled out during validation tests, small-scale trials, and large-scale trials. The next data collection method is formative testing, which involves measuring scores through pre-tests and post-tests before and after the intervention in large-scale trials. Data analysis used a paired t-test to determine whether there was an improvement in learning outcomes after the intervention, which was then measured using an n-gain test according to the following table 2 and table 3.

Table 2. Gain Normality Value Category

Nilai Normalitas gain	**Kriteria**
$0{,}70 \leq n \leq 1{,}00$	High
$0{,}30 \leq n < 0{,}70$	Medium
$0{,}00 \leq n < 0{,}30$	Low
$n \leq 0{,}00$	Fail

Source by Wahab, Junaedi, dan Azhar (2021)

Table 3. Interpretation of N-Gain Effectiveness

Persentase (%)	**Interpretasi**
> 76	Effective
56 – 75	Quite effective
40 – 55	Less effective
< 40	Ineffective

Source by Setiawan dan Aden (2020).

3. Results and Discussion

Development of a Green Environment-Based Civic Obligation Module

The results of development according to the ADDIE development model are explained in each stage, namely analysis, design, development, implementation, and evaluation. The following is an explanation of the results of development in each stage:

a. Analysis Stage

The analysis conducted revealed that in recent years there have been environmental cases in several regions and countries, such as an increase in the amount of uncontrolled plastic waste and deforestation, as well as global warming and extreme climate change. These cases are largely caused by human behavior that disregards the environment. The United Nations Environment Programme (UNEP), as the authority responsible for inspiring, activating, and mobilizing the global community to develop policies on the environment and sustainable development, states that forest habitats covering more than 30% of the world's land area, which are home to 1.6 billion people, have been reduced. UNEP explains that over the past 30 years, 420 million hectares of forest have been lost, with an additional 100 million hectares at risk of being lost (Corporate Services Division UN Environment Programme, 2015).

The above cases involve environmental issues caused by human behavior that lacks concern for the environment. Environmental pollution and human indifference toward the environment are at the core of the current problems. The solution to address this issue is to find ways to increase human concern for the environment. The solution to environmental problems is to build people's knowledge about the environment. Existing knowledge shapes environmental awareness, which in turn leads to solutions to problems (Munawar, Heryanti, and Miarsyah, 2019). In other words, a person's knowledge about the environment influences the emergence of intentions and willingness to act, which are then realized in the form of actions to preserve the environment. Increasing knowledge and awareness to prevent and address various environmental issues is part of the role of environmental education (Widyaningrum, 2016). Based on a review of theories regarding human concern for the environment, the results obtained from (Rahman and Fitria, 2021) indicate that one way to increase public concern is through education. The role of education oriented toward environmental values can enhance knowledge and concern to prevent and address various environmental issues. The education in question is formal education that can change human behavior through the use of learning tools.

Thus, based on the theoretical review, it was found that to address environmental issues and the lack of human concern for the environment, environmental education is necessary. Environmental education plays a role in shaping knowledge and awareness to behave in an environmentally conscious manner. Environmental education can fulfill its role by using learning tools that support environmental content. Learning tools are instruments used in education to enhance students'

concern for the environment, enabling them to address current environmental issues. Supportive learning tools are self-guided teaching modules that encourage student engagement in learning, thereby increasing their environmental awareness through their own initiative. The teaching modules used are environment-based Pancasila education modules (according to the major) to increase students' concern for the environment.

b. Design Stage

The results of the analysis stage which obtained the results that it was necessary to make teaching materials based on the environment (green environment) to overcome environmental problems and environmental care behavior were followed up by designing a framework for making modules at the design stage. The module is designed with green and environmental themed items in the form of green border lines and leaf icons on page numbers as a form of environment in appearance. The cover will have a green theme with city and earth items to illustrate the green environment on earth. The design stage focuses on creating an outline of the module format and the design of the module preparation steps.

The module format is the content design of the module based on the necessary components. The module format is needed as an initial framework for the module content before proceeding to create the module. The content format within the module consists of: (1) introduction; (2) table of contents; (3) apersepsi; (4) module usage instructions; (5) initial ability check; (6) concept map; (7) learning outcomes and learning objectives; (8) learning activities; (9) practice questions; (10) assessment; (11) did you know; (11) answer key; (12) scoring guidelines; (13) self-assessment; (14) glossary; (15) bibliography.

The steps for creating modules carried out at the design stage are: (a) determining learning outcomes and learning objectives; (b) determining the target subject of the product; (c) determining the model, learning methods, and learning media; (d) determining the learning material; (e) determining the instruments used in learning evaluation; and (f) creating modules. The selected learning outcome is the obligations of citizens towards the environment. The learning outcomes were selected because there is a connection between citizens' obligations toward the environment, as stipulated in Article 28H(1) of the 1945 Constitution. The learning objectives were set as 13 learning objectives in the knowledge (cognitive) aspect and 2 learning objectives in the attitude (affective) aspect. The following are the learning outcomes and learning objectives that have been established:

The target audience for this product is students who are intended to use the module. The students selected are those in grade 10. The learning model and method used are problem-based learning and discovery learning, while the learning media used are drive-based modules. The problem-based learning model and discovery learning method are learning models and methods that are case-oriented, with students independently searching for and discovering knowledge. The learning media used are electronic PDF files and files on Google Drive links.

The selected material has also been determined, namely the obligations of citizens towards the environment for students in grade X. The selected learning material is in line with the learning outcomes, namely the obligations of citizens, which are then integrated with environmental values to become material on the obligations of citizens towards the environment. The instruments used in learning evaluation are formative tests for knowledge aspects and self-assessment sheets for attitude aspects. Formative tests are conducted at the beginning, middle, and end of learning, with test results used as evaluation materials for subsequent sessions. Self-assessment sheets are forms filled out by students themselves regarding their level of understanding before and after using the module.

The results of the components, including learning outcomes and learning objectives, models, methods, and learning media, learning materials, and learning evaluation instruments, are compiled into a unified learning product, namely a green environment-based civic obligation module to increase students' awareness of the environment in grade X.

c. Development Stage

The development stage is carried out by creating modules in accordance with the module creation steps and module format specified in the design stage, then tested for feasibility by experts and tested for practicality by users on a small scale. The modules were created by the developer himself with the help of a friend named Hilman Amirudin in designing the cover and page content. The result of the development stage was a completed module. The learning module consisted of 128 pages with an A4 layout containing several components. The module features a green theme, symbolizing the environment through green borders and leaf icons on the page numbers, reflecting the environmental theme in its design. The cover is dominated by green color with city and earth icons, representing the green environment on Earth. The contents and appearance of the completed module can be seen in figure 1, figure 2, figure 3, and table 4.

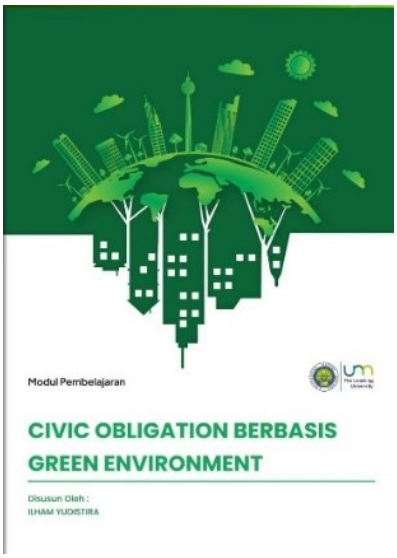

Figure 1. Cover

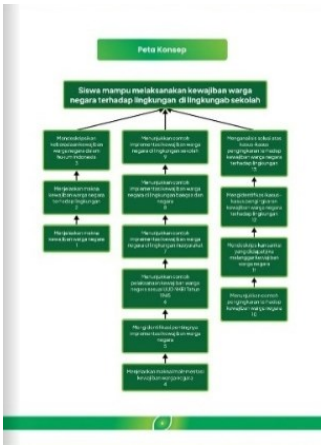

Figure 2. Consept Map

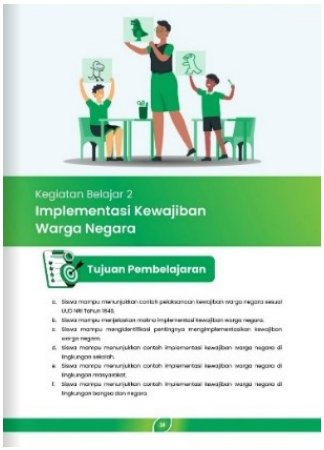

Figure 3. Learning Activities

Table 4. The Results of Developed Module Results

Content	Description
Cover	The cover is the part of the module that shows the outer layer/cover of the module, which is designed with an environmental theme that is embodied in a green earth and green city.
Foreword	Foreword, which is the part of the module that explains the author's statement about the module and expectations related to its use, placed at the beginning.
Table of Contents	Table of Contents, which includes all sections of the module, from the introduction to the final section, the bibliography.
Apersepsi	Apersepsi, which is the introductory section explaining the author's rationale, namely environmental damage caused by human behavior, which forms the background for the creation of the module and the selection of material in the module.
The Initial Assessment	The initial assessment is a section of the module that contains 10 statements about learning objectives to measure the extent of students' understanding before using the module.
Consept Map	Concept map, which is a representation in the form of a flowchart that illustrates the flow of learning activities based on the levels of learning objectives studied in the module.
Instructions For Using The Module	Instructions for using the module, including a description of the procedures that must be followed when using the module in sequence,

	an explanation of what needs to be done when using the module, and an explanation of how to use the items contained within it
Learning Outcomes and Learning Objectives	Learning outcomes and learning objectives are parts of the module that outline the main objectives and detailed indicators related to what is to be achieved in learning. There is one learning outcome, while the learning objectives are divided into 13 learning objectives in the knowledge (cognitive) aspect and 3 learning objectives in the attitude (affective) aspect.
Practice Questions	Practice questions are part of the learning activities, with each learning activity containing 10 multiple-choice questions and 4 essay questions. Practice questions are located at the end of the learning activity after the material section, and students must complete the practice questions before moving on or completing the learning activity, with the requirement that their scores must meet the minimum passing criteria (KKM).
Learning Activities	Learning activities, which consist of learning materials, assignments, and evaluations, are all part of the learning process. Learning activities are divided into three categories: (a) learning activity 1 on the obligations of citizens; (b) learning activity 2 on the implementation of citizens' obligations; and (c) learning activity 3 on the violation of citizens' obligations.
Did You Know	Did you know, is the section presents information and facts about the world based on reliable sources regarding environmental damage and the role of the environment. The Did You Know section is included in each learning activity.
Assessment	Assessment, which is the final part of the module (after learning activity 3), consists of 15 multiple-choice questions and 4 essay questions. Students must complete the assessment before finishing the entire learning sequence in the module, with the requirement that their scores meet the minimum passing criteria (KKM).
Answer Key	The answer key is the section that shows the correct answers to the practice questions and assessments. The answer key is provided after the practice questions in each learning activity, as well as after the assessment.
Scoring Guidelines	Scoring guidelines, which are guidelines for students to assess the results of their practice questions and assessments based on the correct answers to multiple-choice questions, as well as based on the number of correct keywords in essay questions. The scoring guidelines are located after the answer key.
Self Assessment	Self-assessment is a section of the module that contains 10 statements about learning objectives to measure the extent of students' understanding after using the module.
Glossary	Glossary, which explains the meanings of key words that frequently appear in the module. The glossary section is located at the end of the module.
Bibliography	The bibliography is a section that lists the author's reference sources used as references for the material and cases contained in the module.

The green environment-based civic duty module has been developed and tested for feasibility by experts and for practicality by students in small-scale classes. The completed green environment-based civic obligation module is tested for feasibility through validation by experts (validators). The bibliography is the section that lists the author's reference sources used as references for the material and cases within the module. The combined validation results from all validators resulted in a score of 92.5 with a very feasible predicate. The following are the details of the combined

validation results from learning experts, subject matter experts, and media experts in table 5.

Table 5. Combined Validation Results

Validator	Total Score Earned	Total Maximum Score	Score	Eligibility Criteria
Learning Experts	42	45	93,3	Very Feasible
Material Experts	51	60	85	Very Feasible
Media Experts	69	70	98,5	Very Feasible
Combined Validation	162	**175**	**92,5**	**Very Feasible**

After the validation test from the experts which resulted in a very feasible predicate, the next stage was the trial. The trial conducted was a limited use of the module (small scale) and on large-scale. The limited trial was conducted on 9 users and 1 teacher in class X-11 at SMAN 1 Kepanjen. The trial was conducted by filling out a user assessment questionnaire. Users assessed the practicality of the module by filling out a product assessment questionnaire by students and subject teachers. The results of filling out the practicality assessment questionnaire obtained a score of 78.8 which included practical. The results of the limited trial can be seen in the following table 6.

Table 6. Practicality Test Results on Small Scale Users and Teachers

Assessment Aspect	Number of Statements	Total Score Earned	Total Maximum Score	Score	Eligibility Criteria
Ease of Use	4	156	200	78	Practical
Language Clarity	3	117	150	78	Practical
Usability	2	77	100	77	Practical
Ease of Material Access	3	124	150	82,6	Practical
Overall Result	**12**	**474**	**600**	**79**	**Practical**

d. Implementation

The next stage is implementation, which involves the use of the product in a large-scale trial involving 22 students and 1 teacher in grade X-5 at SMAN 1 Kepanjen. The trial of the green environment-based civic duty module began with opening the learning module to understand the learning flow and how to use the learning module, after which the students opened the learning module. The learning took place over 4 sessions held outside the classroom (in the environment). The feasibility assessment results according to the students and subject teachers scored 86, which included the criteria of being very practical.

The results of data analysis on the attitude aspect are predicates not in the form of scores so that data analysis does not use t tests or n-gain, but only descriptive explanations. The results of data analysis on the attitude aspect showed that there were 8 students who experienced an increase from “often maintaining environmental cleanliness, throwing garbage in its place, caring for plants, and

inviting others to maintain environmental cleanliness" to "always maintaining environmental cleanliness, throwing garbage in its place, caring for plants, and inviting others to maintain environmental cleanliness", while the other 14 students did not experience an increase (fixed).The feasibility test results can be seen in the following table 7.

Table 7. Practicality Test Results on Large Scale Users and Teacher

Assessment Aspect	Number of Statements	Total Score Earned	Total Maximum Score	Score	Eligibility Criteria
Ease of Use	4	22	460	86,5	Very Practical
Language Clarity	3	22	345	82,8	Very Practical
Usability	2	22	230	86,9	Very Practical
Ease of Material Access	3	22	345	88,4	Very Practical
Overall Result	**12**	**22**	**1380**	**86,1**	**Very Practical**

Data analysis on the knowledge aspect used t-test and n-gain. The answer statements are processed based on the question answer key. T The t test used the Wilcoxon test because the data obtained from questionnaires and tests are not normally distributed so they cannot be tested parametrically. The Wilcoxon test was conducted using the SPSS application and obtained an increase from the treatment carried out of 0.038. The n-gain test was conducted by comparing the results of the pre-test and post-test scores. The n-gain test results on the knowledge aspect obtained a value of 0.3 which is included in the moderate category. The interpretation of the n-gain score on the knowledge aspect scored 38.7 which is included in the ineffective category.

e. Evaluation Stage

The module improvements made are increasing the number of meetings on the learning plan in the teaching module (instructions for using the module) from the previous 4 meetings to 6 meetings. the number of meetings is adjusted to the material load in learning activity 2 and learning activity 3 which are added one meeting each. The next improvement is to make a group assignment in learning activity 2 on the implementation of citizens' obligations to the environment in the surrounding environment and make a group assignment in learning activity 3 on making a video with the theme of denial of citizens' obligations to the environment. Another evaluation is to review the attitude aspect by adding a self-assessment sheet instrument as a reference for assessing students' level of concern for the environment. Improvements to the module were made to the cover design and content of the module which had no author's history section and cover cover for the module. The following are the results of the revision in the form of making group assignments in learning activities

Feasibility of Green Environment-Based Citizenship Module

The module feasibility test by the validator as a whole obtained a score of 92.5 with a very feasible predicate. Feasibility (validity) is a measure of the accuracy /

suitability of the product developed. Product requirements can be said to be feasible if in terms of content it has a strong theoretical basis in its development, and in terms of construct it has the necessary components that are consistently related to each other. Product feasibility testing through validation by validators who are experts who have experience in assessing products. The test results are evaluation materials for improving module deficiencies (Fitria, Mustami, and Taufiq, 2017).

Practicality of Green Environment-Based Citizenship Module

The practicality test was carried out by students and subject teachers on a large-scale trial obtained a score of 86.1 which included very practical criteria. The practicality test shows that teaching materials can be said in the process of using them, students and educators find it easy to use them. Teaching materials are classified as practical if they are operationally easy to use, easy to understand, and time efficient to use. Learning products, namely teaching materials, need to be easy to use so that students during learning do not experience difficulties so that they support the achievement of predetermined learning objectives (Daud, 2022). The practicality test shows that the assessment of users and teachers is that learning products are easy and can be used by students and teachers. The results of the practicality test have met the requirements of module practicality, namely: (1) the product is said to be used in the field by users or parties involved in the use and (2) the practicality of the product is included in the "good (practical)" scale (Fitria, Mustami, and Taufiq, 2017).

Effectiveness of Green Environment-Based Citizenship Module

The results of filling out the pre-test and post-test on the attitude aspect show an increase in environmental care behavior, namely there are 8 students who from previously "often keep the environment clean, throw garbage in its place, take care of plants, and invite others to maintain cleanliness" to "always keep the environment clean, throw garbage in its place, take care of plants, and invite others to maintain cleanliness" to "always keep the environment clean, throw garbage in its place, take care of plants, and invite others to maintain cleanliness", while the other 14 students did not experience an increase (fixed). The results of filling in the pre-test and post-test on the knowledge aspect after being analyzed with the t test showed that there was an increase in learning outcomes in the knowledge aspect after being treated based on the results of the t test with the Wilcoxon test of 0.038. The effectiveness of the product on the knowledge aspect is included in the ineffective category. The n-gain test results on the knowledge aspect obtained a value of 0.3 which is included in the moderate category. The results of the interpretation of the n-gain score on the knowledge aspect scored 38.7 which is included in the ineffective category. The test to determine effectiveness is obtained by analyzing student learning outcomes. Learning outcomes can be analyzed with the t test. The t test is a test conducted by comparing two average data to obtain the results of whether or not there is a difference between the two. The t-test used is a paired-samples t-test (dependent-samples t-test) which is a t-test that aims to compare mean data from the same two groups with different treatments (Putri et al., 2023). Measurement of effectiveness with a learning outcomes test which

determines that the impact of using teaching materials on students is still not effective (Chabib, Djatmika, and Kuswandi, 2017). Product effectiveness is assessed by analyzing the impact/results obtained by students after experiencing the learning process (Fitria and Taufiq, 2017).

4. Conclusion

The results of the development of the green environment-based civic duty module show that the module is highly suitable for use with students, according to assessments by subject matter experts, learning experts, and media experts. The developed module was considered very practical for use with students according to the assessments of students and teachers during large-scale trials. The effectiveness of the module when used in the classroom showed an impact on improving student learning outcomes, which were categorized as low in terms of attitude and moderate in terms of knowledge. In terms of feasibility, practicality, and effectiveness, the module can be used in the classroom for students with some revisions for improvement.

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How to cite this article:

Yudistira, I., Awaliyah, S., & Rochmadi, N. W. (2025). Development of A Green Environment-Based Civic Obligation Module to Increase Students' Awareness of The Environment at Kepanjen National 1 Senior High School. *Journal of Educational Sciences*, *9(6)*, 5647-5661.