

## **Development of Pancasila Educational Teaching Materials and Environment Based Citizenship Wetland**



**Rabiatul Adawiah<sup>1</sup>, Mahmuddin<sup>2</sup>**

<sup>1,2</sup>Faculty of Teacher Training and Education, Lambung Mangkurat University, South Kalimantan, Indonesia

**ABSTRACT:** This study aims to determine the validity, effectiveness and practicality of teaching materials on Pancasila Education and Citizenship on the subject of Archipelagic Insight based on wetlands. The research was conducted at Sungai Tabuk 1 Public High School, Banjar Regency, South Kalimantan for the 2021/2022 academic year. This research is a development research using the Tessmer model. Data collection was carried out by means of questionnaires, interviews and observations. Data analysis was carried out in a quantitative descriptive manner. The results of this study indicate that the teaching materials for Pancasila Education and Archipelagic Citizenship Based on Wetland Environment are declared valid. This is based on the results of expert reviews on the suitability of the material, the composition of the material, the consistency of writing, the display of photos/images, the display of tables, the shape and size of letters, conformity with the writing of Indonesian language rules, and suitability of the images with the material. Teaching materials are also stated to be practical to use. This is known from the results of individual trials and small group trials. Some of the things asked for by students' opinions were about the ease of understanding the content of the material, clarity in understanding instructions in doing group assignments, and clarity in understanding individual assignments. In addition, teaching materials are also declared effective. This is known from field or large-scale trials conducted on intact classes. From the results of the effectiveness test of teaching materials, it is known that they are in the good and very good categories.

**KEYWORDS:** development, teaching materials, insight into the archipelago, environment, wetlands

### **INTRODUCTION**

A clean and beautiful environment is the dream of every citizen who lives in a settlement. However, today's environmental conditions and problems have become global issues that require serious and continuous solutions. Various environmental problems such as global warming, the greenhouse effect, and other forms of environmental damage such as floods, air pollution caused by forest fires and the use of uncontrolled technology, and forest fires indicate poor environmental conditions (Sulkipani & El Faisal, 2020). Various These environmental problems are problems that occur in almost every region, including in Banjar Regency. This problem is closely related to human behavior (Julina, 2016; Palupi, 2017) is said to be a moral problem. Behavior as the actualization of individual knowledge and feelings is of course greatly influenced by mindset. Building a mindset is a preventive effort to solve these problems, a good mindset will certainly influence behavior, so what emerges is environmental care behavior (Elsa et al., 2018).

Concern for the environment is a form of individual mental attitude which is reflected in their behavior (Hamzah, 2013). A similar statement was also put forward by Sue (Tamara, 2016) that caring for the environment is a general attitude towards environmental quality which is manifested in the willingness to express actions that can improve and maintain environmental quality in every behavior related to the environment.

So that people have concern for the environment, various efforts have been made by the Government, and one of them is through educational institutions (schools). School is the initial place of knowledge and various kinds of information are given. Through schools, fostering, planting, and actively involving students in growing environmental awareness has great potential and is suitable for delivery through the education channel. Besides that, the school will be able to increase the interaction and participation of all stakeholders and the school's academic community to care more about the environment. The Indonesian Ministry of Environment in collaboration with the Indonesian Ministry of Education and Culture launched the Adiwiyata school program, as a form of government concern for the environment through education (Setyobudi & Marsudi, 2018).

In addition to the Adiwiyata program, environmental awareness can also be cultivated through integration into Pancasila and Citizenship Education (PPKn) subjects as part of the school education curriculum that examines human rights and obligations to become Indonesian citizens who are intelligent, skilled, and with good character. mandated by Pancasila and the 1945 Constitution (Permendiknas No. 22 Th. 2006 in Kurniawan, 2013). Based on this, it is very relevant to build this environmental awareness through PPKn, considering PPKn's function as character education (Sulkipani & El Faisal, 2020).

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In an effort to develop students' environmental care attitudes through Civics learning, teaching materials are needed that support the implementation of these goals. Teaching materials are all forms of materials or materials that are arranged systematically which are used to assist teachers or instructors in carrying out teaching and learning activities so as to create an environment or atmosphere that allows students to learn (Hamdani, 2011). Another opinion says that teaching materials are all materials (both information, tools, and text) that are systematically arranged, presenting a complete figure of the competencies to be mastered with the aim (Prastowo, 2011). It can also be said that teaching materials are components of message content in the curriculum that must be conveyed to students (Ridwan, 2015)

Based on an analysis conducted on several teaching materials for Pancasila Education and Citizenship Education, especially teaching materials for class X, the substance of the study has not integrated environmental values. Besides that, the phenomena presented are too general and rarely experienced by students directly. As stated by Satriawan & Rosmiati (2016) that the teaching materials used in schools are still far from the reality of everyday life and difficult to digest and complicated language styles, examples of phenomena presented are rarely or even not experienced by students directly. This is thought to be one of the reasons that civics learning is considered by some students to be boring.

Based on this, the development of PPKn teaching materials based on the wetland environment is considered very important to do. The development of PPKn teaching materials based on the wetland environment is inseparable from the nature of PPKn itself as a scientific field that examines the moral values of citizenship from the point of view of the rights and obligations of citizens, including the rights and obligations to protect and preserve the environment as a unified space. called ecosystem.

### RESEARCH METHODS

This research was conducted at SMA Negeri 1 Sungai Tabuk, Banjar Regency, involving three students from the Pancasila and Citizenship Education Study Program, Lambung Mangkurat University, Banjarmasin.

Research development uses the Tessmer model (Tessmer, 1993), as shown in Figure 1 below

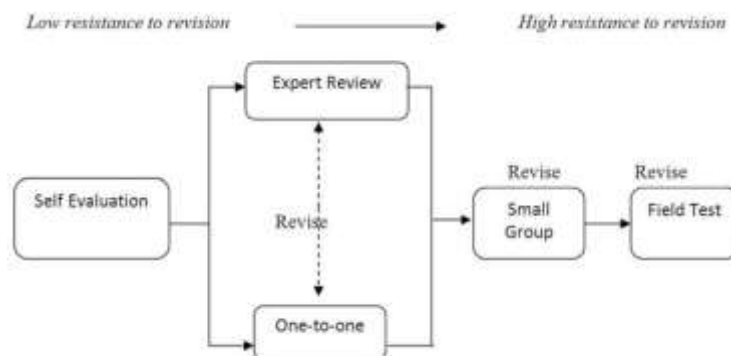


Figure 1. Formative Evaluation Design Flow (Tessmer, 1993)

The research instruments used included validation sheets of Archipelagic Insight teaching materials and student response questionnaires. The validity of teaching materials can be viewed from the aspects of format, language, content, presentation and benefits of teaching materials. The practicality of teaching materials is assessed from three aspects, namely the ease of use of teaching materials, the benefits of teaching materials, and the efficiency of learning time when using the developed teaching materials. The practicality of the content through individual tests was obtained from students' opinions about teaching materials. Expected practicality and actual practicality are obtained through students' opinions about implementation in learning. The effectiveness of teaching materials on environmental concern for wetlands is obtained through a self-assessment instrument, using assessment criteria.

Data collection techniques using questionnaires, interviews and observation. The data obtained were then analyzed in a quantitative descriptive manner. Content validity analysis uses the V index from Aiken with the formula  $V = \sum s / [n(c-1)]$  (Azwar, 2015).

### RESULTS AND DISCUSSION

This study aims to evaluate the quality of PPKn teaching materials in Wawasan Nusantara Principal High School as a result of the development to increase students' concern for the environment, especially the wetland environment.

The quality of Civics teaching materials, based on content validity, practicality and effectiveness through the micro-cycle stages. As previously mentioned, content validity was obtained through expert judgment, namely 2 experts in Civics learning, 1 expert in assessment, 1 expert in wetlands and 1 expert in Grammar.

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The practicality of the content of the material is carried out through individual tests, the practicality of expectations is carried out through small group tests, the actual practicality and effectiveness are carried out through field tests.

### 1. Content Validity of Teaching Materials

The teaching materials on Archipelagic Insights Based on Wetland Environment were validated by five experts. The validated aspects are: suitability of material, arrangement of material, consistency of writing, display of photos/images, table display, shape and size of letters, suitability for writing Indonesian language rules, suitability of images with material, clarity of group assignments and clarity of individual assignments.

The results of expert validation can be seen in the following table

**Table 1. Results of Content Validity**

No	Panelists										$\Sigma S$	V	Ket
	A		B		C		D		E				
1	3	2	4	3	4	3	3	2	4	3	13	0.86	Valid
2	4	3	3	2	4	3	4	3	4	3	14	0.93	Valid
3	3	2	4	3	4	3	3	2	4	3	13	0.86	Valid
4	4	3	4	3	3	2	3	2	4	3	13	0.86	Valid
5	4	3	3	2	3	2	4	3	3	2	12	0.80	Valid
6	4	3	3	2	4	3	4	3	3	2	13	0.86	Valid
7	3	2	3	2	4	3	2	1	4	3	11	0.73	Valid
8	3	2	4	3	4	3	3	2	4	3	13	0.86	Valid
9	3	2	3	2	3	2	4	3	3	2	11	0.73	Valid
10	4	3	3	2	3	2	3	2	3	2	11	0.73	Valid
11	3	2	4	3	4	3	4	3	4	3	14	0.93	Valid
12	3	2	4	3	3	2	4	3	4	3	13	0.86	Valid
13	4	3	4	3	4	3	3	2	4	3	14	0.93	Valid
14	4	3	4	3	3	2	3	2	3	3	13	0.86	Valid
15	3	2	3	2	3	2	4	3	4	3	12	0.80	Valid
Average												0.78	Valid

### 2. Practicality of Content Teaching Materials

To find out the practicality of using teaching materials is through individual tests, namely students' opinions on draft 2 teaching materials. Several things were asked for students' opinions, namely regarding the ease of understanding the contents of the material, clarity in understanding instructions/how to do group assignments, and clarity in understanding individual task. The results of the individual tests can be seen in the following table

**Table 2. Summary of Content Practicality Test Results**

No	Aspect	Answer	Category
1	Every part studied is easy to understand	3	Good
2	Instructions on how to do the task are clear	4	Very good
3	The entire content is complete	2	Not enough
4	The words/sentences used are easy to understand	2	Not enough
5	Good image quality	3	Good
6	Attractive image quality	4	Very good
Average		3	Good

If averaged, the overall score obtained is 3 (good criteria). Clarity in carrying out tasks greatly contributes to the attractiveness of teaching materials. Examples of group assignments contained in teaching materials can be seen in the following figure

**Kegiatan 3**

**Judul Kegiatan** : Berlatih Mengidentifikasi Tantangan-Tantangan dalam Mewujudkan Wawasan Nusantara di lingkungan lahan basah

**Jenis Kegiatan** : Diskusi Kelompok

**Tujuan Kegiatan** : Peserta didik dapat menyebutkan dan menjelaskan tantangan-tantangan dalam mewujudkan wawasan nusantara di lingkungan lahan basah dengan tepat.

Agar kamu dapat menyebutkan dan menjelaskan tantangan-tantangan dalam mewujudkan wawasan nusantara dengan tepat, lakukanlah langkah-langkah berikut.

1. Buatlah kelompok diskusi yang beranggotakan 4-5 orang temanmu. Anggota kelompok beragam dan jadikan keberagaman kelompokmu sebagai anugerah dari Tuhan Yang Maha Esa.
2. eBersama anggota kelompokmu, berkunjunglah ke perpustakaan sekolah untuk membaca buku-buku referensi yang membahas tentang tantangan-tantangan dalam mewujudkan wawasan nusantara.
3. **Ajukan beberapa pertanyaan** kepada bapak atau ibu guru, apabila ada informasi yang sulit dimengerti oleh kelompokmu!
4. Jika di sekolahmu menyediakan fasilitas internet, akseslah halaman *website* yang memuat informasi mengenai tantangan-tantangan dalam mewujudkan wawasan nusantara.
5. **Berdiskusilah** dengan kelompokmu tentang tantangan-tantangan dalam mewujudkan wawasan nusantara, kemudian berikan tanda cek pada uraian pernyataan berikut.

Perilaku	Sesuai	Tidak Sesuai
Membuang sampah rumah tangga ke sungai	....	....
Mendirikan jamban di sungai	....	....
Gotong royong membersihkan sungai	....	....
Menjaga kelestarian sungai	....	....
Menangkap ikan dengan racun	....	....
Menggunakan air secukupnya	....	....
Melakukan penghijauan di sekitar sungai	....	....
Memelihara tanaman yang ada di sekitar sungai	....	....
Menggunakan pupuk pestisida untuk tanaman	....	....
Membangun rumah dengan menutup saluran air ke sungai	....	....

Thus the structure of the teaching material for Wetland-Based Archipelago Insights for draft 3 was successfully obtained. The next step is to determine the practicality of expectations through small group tests to produce draft 4

### 3. The Practicality of Expectations and the Effectiveness of Expectations

The practicality of expectations and the effectiveness of expectations are obtained through small group trials, namely in. very limited number of students. In this study with a total of 6 people consisting of 2 students who were considered to have high abilities, 2 students who had moderate abilities and 2 students who had low abilities. If the results are good or very good, then it can be continued at the field test stage to get a prototype of the archipelago insight teaching material based on the wetland environment.

The results of the practicality test of expectations related to the ease of use of teaching materials can be seen in the following table

**Table 3. Expected Practicality Test Results**

No	Aspect	Respondents Answer						Average	Ket
		1	2	3	4	5	6		
1	Is the content easy to learn?	4	4	4	4	4	4	4	Very good
2	Is the content easy to understand?	4	4	2	4	4	4	3,7	Very good
3	Are the instructions for performing individual tasks easy to understand?	4	4	2	4	4	4	3,7	Very good
4	Are the instructions for doing group work easy to understand?	4	4	2	4	4	4	3,7	Very good
5	Is the time provided to study the material sufficient	2	2	4	4	2	2	2,7	Not good
6	Are the photos/images in the material interesting?	4	4	2	4	4	4	3,7	Very good
7	Do the photos/pictures help to understand the material?	4	4	4	2	4	4	3,7	Very good
8	Are the photos/images available to study the material more interesting?	4	4	4	4	4	4	4	Very good

Based on the table above, it is known that the results of the expected practicality test (draft 3) are stated to be very good on average. It can be concluded that the teaching materials are easy to use.

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### 4. The Effectiveness of Teaching Materials

The effectiveness of teaching materials is obtained through field trials. At this stage, the teaching material is tested on the whole class. If the results are at least good, then a prototype of PPKn teaching material on the subject of Archipelagic Insight based on wetland environment is obtained. A summary of the results of the effectiveness of teaching materials can be seen in the following table

**Table 4. Results of Teaching Materials Effectiveness Test**

No	Aspek	Alternatif jawaban																								Rerata	Ket
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
	Kemudahan dalam mempelajari materi	4	4	4	4	4	4	4	4	4	4	4	4	4	2	2	4	4	4	4	4	4	4	4	4	3,8	SB
	Kemudahan dalam memahami materi	4	4	4	4	4	4	2	4	4	4	4	4	2	2	4	4	4	4	4	4	4	4	4	4	3,75	SB
	Kejelasan dalam mengerjakan tugas individu	2	2	2	4	4	2	2	2	4	4	2	4	4	2	2	4	2	4	4	4	4	4	2	3,0	B	
	Kejelasan dalam mengerjakan tugas kelompok	4	4	4	4	4	2	2	4	4	2	4	4	4	4	4	4	4	4	4	2	4	4	4	2	3,58	SB
	Kecukupan waktu dalam mempelajari materi	4	2	2	2	2	4	4	2	2	4	4	2	2	2	4	2	4	2	2	2	2	2	2	2	3,4	B
	Tampilan foto pada materi	4	4	4	4	4	4	4	4	4	2	4	4	4	4	4	2	4	4	2	2	2	4	2	4	3,5	SB
	Peran foto dalam membantu memahami materi	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3,9	SB
	Peran foto dalam memotivasi untuk mempelajari materi	4	4	4	4	4	4	4	4	4	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3,9	SB

Based on table 4 it is known that the results of the effectiveness of teaching materials for Pancasila Education and Citizenship Archipelago based on wetlands are in the good and very good categories.

From several stages it can be seen that the results of this study indicate that the teaching material for insight into the archipelago based on the wetland environment was declared valid based on the review of the expert team, which consisted of five people. As stated by Adila & Aziz (2019) that product validity can be done by presenting several experienced experts or experts. Each expert was asked to rate the product in this study as teaching material for insight into the archipelago based on a wetland environment with the aim of knowing its strengths and weaknesses. In other words, experts provide an assessment of teaching materials to provide input and improvement.

Validated aspects include: consistency in writing, suitability of photos/images with material, appearance of photos, suitability of materials, and clarity of assignments given. Inputs, suggestions and opinions from experts are taken into consideration for improving teaching materials for archipelago insight based on the wetland environment.

The meaning of validity is the extent to which the elements in a measuring instrument are truly relevant and represent a contract that is in accordance with the measurement objectives (Haynes, Richard & Kubany, 1995). This indicates the importance of content validity in developing non-cognitive scales and cognitive tests that measure latent psychological attributes (Azwar, 1997). Another meaning of validity is put forward by (Syarif & Syamsurizal, 2019) that a measuring tool is considered valid if it is in accordance with the content of the curriculum to be measured. The concept of content validity includes face validity and logical validity (Azwar, 1997). In assessing the feasibility of displaying items, then a deeper analysis is carried out with the aim of assessing the feasibility of the contents of the items as a description of the behavioral indicators of the attributes being measured. This assessment is qualitative and judgmental and carried out by a panel of experts, not by the authors. This is the procedure that produces logical validity. How high the agreement among experts who evaluate the feasibility of an item can be estimated and quantified, which in turn can be used as an indicator of content validity.

In this study, the test used to determine the validity of the Wetland Environment-based Nusantara Insights teaching materials was the Aiken's Test. From the tests conducted, the wetland-based archipelago insight PPKn teaching materials have valid criteria.

In addition to having good validity, the teaching materials for Wetland-Based Archipelagic PPKn are also practical to use. This is known from the results of individual tests and small group test results. Teaching materials are stated to be easy to learn and understand seen from: (1) ease of learning the content of the material, (2) clarity of instructions in carrying out assignments both individual and group assignments (3) Availability of time in studying the material, and (4) Clarity of photos or pictures in material.

These findings are in line with other similar studies, such as the results of research put forward by Zaini and Amintarti (2022) which in their research conclusions stated that the development of an e-LKPD book containing the concepts of plantae, animalia, ecosystems, and environmental change is stated to be valid, easy to use and effective. Easy to use means that the teaching material for PPKn Nusantara Insights Based on Wetland Environment can be used in learning.

The findings of development research are a guarantee of quality, because this model does not allow proceeding to the next stage if results are found under the agreed conditions in the assessment rubric. Therefore remedial is always open at every micro cycle.

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### CONCLUSION

The teaching material for Pancasila Education and Archipelagic Citizenship Based on Wetland Environment was declared valid. This is based on the results of expert studies on the suitability of the material, the composition of the material, the consistency of writing, the display of photos/images, the display of tables, the shape and size of letters, the suitability of writing Indonesian language rules, and the suitability of images and material.

The teaching materials for PPKn Nusantara Insights Based on Wetland Environment are also stated to be practical to use. This is known from the results of individual trials and small group trials. Some of the things asked for by students' opinions were about the ease of understanding the content of the material, clarity in understanding instructions/how to do group assignments, and clarity in understanding individual assignments.

Wetland Environment-Based PPKn Nusantara Insights teaching materials were also declared effective. This is known from field or large-scale trials conducted on intact classes. From the results of the effectiveness test of teaching materials, it is known that they are in the good and very good categories.

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