

Stage of Assessment of Geography Development Master Planning Based on Decision for the Community

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Abstract—The purpose thestage of assessment of geography development master planning based on decision for the community. This module is a teaching material, as a learning resource for students, which can facilitate students to get information and easy to apply in everyday life and for the community. Hence the need for a faith-based disaster geography module that can be used as a teaching material in accordance with current events and disaster-related cases. The methodology of this research is descriptive. The results of the study were: 1). the content feasibility variable is very valid and Cronbach's Alpha value is 0.907, then this module is reliable, 2). presentation variable is very valid and Cronbach's Alpha value is 0.955, then this module is reliable and 3). language variable is very valid and Cronbach's Alpha value is 0.939, then this module is reliable.

Keywords—Assessment, Geography and Community

I. PRELIMINARY

Disaster is an event that can naturally happen anytime, anywhere and anytime. Natural disasters are natural phenomena that occur outside of human will. The occurrence of natural disasters poses a risk or danger to human life, either loss of property, or casualties. This matter encourage the people of Padang City who live in the area of disaster prone areas to know, understand, overcome, and overcome disaster to ensure safety and comfort. Besides the people who are responsive to the disaster, it is also necessary that the students are responsive to the disaster for the community. Knowledge and attitude, emergency planning, warning systems and resource mobilization must be owned by the community in the

face of disasters [1]. Community involvement to implement good cooperation is one of the important actions to overcome disasters [2].The city of Padang, located in the coastal area of West Sumatra, has a high potential for disaster. The city of Padang is on the west coast of Sumatra. This causes the city of Padang often experience natural disasters such as floods, earthquakes, and even potentially to tsunamis. Map of the Flood Evacuation Pathway contributes to improving community preparedness[2]. Structural mitigation directions can also be carried out based on the level of vulnerability and type of disaster[3].

Responding to the disaster above, the Study Program of Geography Education STKIP PGRI West Sumatra include courses related to disaster that is disaster geography. So that students know information about mitigation, handling and adaptation of disaster. Information in the form of knowledge obtained by students can be applied in everyday life. So that people gain knowledge from some students around them. This is an effort to improve students' understanding, knowledge and attitude in facing disaster. However, students' understanding, knowledge and attitude in dealing with disasters are still very unfavorable when associated with faith, such as acting inadvertently, selfish and less submissive to the Creator God.

Therefore, there needs to be a module on faith-based disaster geography. This module is a teaching material, as a learning resource for students, which can facilitate students to get information and easy to apply in everyday life, so that students can play a role in face up disaster. The existing geographic disaster

module, cannot describe what is needed and needed by students living in disaster prone areas such as flood, landslide, earthquake and tsunami based on faith. Hence the need for a faith-based disaster geography module that can be used as a teaching material in accordance with current events and disaster-related cases.

Based on the above background, then conducted a research entitled "Stage of assessment of geography development master planning based on decision for the community".

II. RESEARCH METHODOLOGY

The methodology of this research is descriptive. Descriptive method can be interpreted as a problem-solving procedure investigated by describing the state of the subject or object in the research can be people, institutions, communities and others who are now based on the facts that appear or what is. Descriptive method aims to accurately describe or describe the facts, characteristics or phenomena studied[4]. The purpose of this descriptive study is to create a description, description, or painting systematically, factually and accurately about the facts, properties and relationships between phenomena investigated. Descriptive research uses observation, interviews or questionnaires about problems that occur at this time[5]. Descriptive method aims to make a description, description, painting systematically, factually and accurately about the facts, properties, or relationships about the phenomenon under study[6]. It can be argued that descriptive research is a study that attempts to describe a phenomenon, an event occurring at the present moment or an actual problem. After the module has been completed, the next step is module validation. Validation aims to determine the suitability of modules that have been made with the purpose of research.

Validation is done by validator who validate the faith-based disaster geography module, which is the expert in their field that is: 1). Disaster Expert, 2) Educational Expert and 3) Indonesian Expert. Validation of this module aims to get perfection, because of comments and suggestions provided by the validator. Furthermore, the researchers also discussed with validators who are experts in their field for the perfection of disaster module, this is an input for qualitative data. The validator assesses the disaster module of each component, namely: the feasibility of content, presentation and language, this is an input for quantitative data. Data collection is done by giving initial module along with evaluation sheet in the form of questionnaire. The expert gives

judgments and comments and suggestions, in terms of content feasibility, presentation and linguistics. The scoring scale used is:

- 1 = Invalid
- 2 = Less Valid
- 3 = Quite Valid
- 4 = Valid Enough
- 5 = Very Valid

For the perfection of this module, the validator provides comments, suggestions and assessments, to be corrected by the researcher.

III. RESEARCH RESULT AND DISCUSSION

Assessment of faith-based geo-disaster geography module is done several times by validator. While the assessment is presented is the final assessment of disaster geography module that has been improved according to the suggestion of the validator are:

A. Feasibility of Content

Assessment of the three validators on the feasibility of the contents of the disaster geography module is shown in the table below:

Table 1. Valuation Feasibility Assessment

| Validator | Validator Item Feasibility Assessment Content | | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|---|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 4 |
| 2 | 5 | 3 | 5 | 4 | 5 | 3 | 4 | 3 | 5 | 4 |
| 3 | 4 | 4 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 5 |

Based on the validator's valuation data, it is calculated using SPSS Version 22.00. The following results are obtained:

Table 2. Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .907 | 10 |

Based on SPSS Version 22.00 calculation for reliability Cronbach's Alpha value is 0.907, because the value is greater than 0.600, it means that the contents of this module is reliable.

Table 3. Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|----------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| VAR00001 | 36.3333 | 30.333 | .454 | .915 |
| VAR00002 | 37.0000 | 31.000 | .778 | .895 |
| VAR00003 | 35.6667 | 30.333 | .891 | .890 |
| VAR00004 | 36.0000 | 31.000 | .778 | .895 |
| VAR00005 | 36.3333 | 30.333 | .454 | .915 |
| VAR00006 | 37.0000 | 31.000 | .778 | .895 |
| VAR00007 | 36.0000 | 31.000 | .778 | .895 |
| VAR00008 | 36.6667 | 26.333 | .731 | .897 |
| VAR00009 | 36.0000 | 25.000 | .866 | .885 |
| VAR00010 | 36.0000 | 31.000 | .778 | .895 |

The validity for the feasibility of the contents of the module based on the Corrected Item Total Correlation Table, all valid, because the result > 0.300.

Table 4. Intraclass Correlation Coefficient

| | Intraclass Correlation ^b | 95% Confidence Interval | | F Test with True Value 0 | | | |
|------------------|-------------------------------------|-------------------------|-------------|--------------------------|-----|-----|------|
| | | Lower Bound | Upper Bound | Value | df1 | df2 | Sig |
| Single Measures | .494 ^a | .120 | .977 | 10.780 | 2 | 18 | .001 |
| Average Measures | .907 ^c | .577 | .998 | 10.780 | 2 | 18 | .001 |

Correlation assessment results by measuring the scale of Intraclass Correlation Coefficient (ICC) on the feasibility of the module contents assessed by the validator. The ICC value obtained from the SPSS Version 22.00 calculation for the feasibility of the contents at the very high position of 0.907 from the average analysis of the inter rater agreement, for one rater consistency is 0.494.

This is in accordance with the development of the course module on Teaching and Learning Science by utilizing research results articles as the main reference from national and international journals deemed feasible by experts to be used in learning [7].

B. Presentation

Assessment of the three validators on the presentation of the disaster geography module is shown in the table below:

Table 5. Rating of Presentation

| Validator | Grain Rating Assessment | | | | | | | | | | | |
|-----------|-------------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 3 |
| 2 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 3 | 3 | 5 | 3 | 4 |
| 3 | 4 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 4 | 5 | 5 | 4 |

Based on the validator data, then calculated using SPSS Version 22.00. The following results are obtained:

Table 6. Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .955 | 12 |

Based on SPSS Version 22.00 calculation for reliability Cronbach's Alpha value is 0.955, because the value is greater than 0.600, it means that the presentation of this module is reliable.

Table 7. Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|----|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| 1 | 43.6667 | 56.333 | .885 | .950 |
| 2 | 43.0000 | 49.000 | .866 | .950 |
| 3 | 43.0000 | 57.000 | .803 | .952 |
| 4 | 43.6667 | 56.333 | .885 | .950 |
| 5 | 43.0000 | 49.000 | .866 | .950 |
| 6 | 43.0000 | 57.000 | .803 | .952 |
| 7 | 43.6667 | 56.333 | .885 | .950 |
| 8 | 43.6667 | 50.333 | .773 | .954 |
| 9 | 44.0000 | 57.000 | .803 | .952 |
| 10 | 42.6667 | 56.333 | .885 | .950 |
| 11 | 43.6667 | 50.333 | .773 | .954 |
| 12 | 43.6667 | 56.333 | .885 | .950 |

The validity for the presentation of the module based on the Corrected Item Total Correlation Table, all valid, because the result > 0.300.

Table 8. Intraclass Correlation Coefficient

| | Intraclass Correlation ^b | 95% Confidence Interval | | F Test with True Value 0 | | | |
|------------------|-------------------------------------|-------------------------|-------------|--------------------------|-----|-----|------|
| | | Lower Bound | Upper Bound | Value | df1 | df2 | Sig |
| Single Measures | .640 ^a | .255 | .987 | 22.347 | 2 | 22 | .000 |
| Average Measures | .955 ^c | .804 | .999 | 22.347 | 2 | 22 | .000 |

Correlation assessment results by measuring the scale of Intraclass Correlation Coefficient (ICC) on the presentation of modules assessed by the validator. ICC value obtained from the calculation of SPSS Version 22.00 for the presentation at a very high position that is 0.955 from the average analysis of inter-rater agreement, for one rater consistency is 0.640.

This is in accordance with integrated local potential disaster mitigation modules in science lessons are included in the valid categories of instructional studies and technical studies and developed modules [8].

C. Language

Assessment of the three validators of language in the disaster geography module is shown in the table below:

Table 9. Language Assessment

| Validator | Grain of Language Assessment | | | | | | | | |
|-----------|------------------------------|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | 4 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 3 |
| 2 | 5 | 3 | 5 | 3 | 3 | 4 | 5 | 4 | 4 |
| 3 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 |

Based on the validator's valuation data, it is calculated using SPSS Version 22.00. The following results are obtained:

Table 10. Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .939 | 9 |

Based on the calculation of SPSS Version 22.00 for the reliability of Cronbach's Alpha value is 0.939, because the value is greater than 0.600, meaning the language of this module is reliable.

Table 11. Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|----------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| VAR00001 | 32.0000 | 31.000 | .778 | .934 |
| VAR00002 | 33.3333 | 30.333 | .891 | .929 |
| VAR00003 | 32.0000 | 31.000 | .778 | .934 |
| VAR00004 | 33.0000 | 25.000 | .866 | .930 |
| VAR00005 | 33.0000 | 25.000 | .866 | .930 |
| VAR00006 | 32.3333 | 30.333 | .891 | .929 |
| VAR00007 | 32.3333 | 26.333 | .731 | .940 |
| VAR00008 | 32.3333 | 30.333 | .891 | .929 |
| VAR00009 | 33.0000 | 31.000 | .778 | .934 |

The validity for the language of the module based on the Corrected Item Total Correlation Table, all valid, because the result > 0.300.

Table 12. Intraclass Correlation Coefficient

| | Intraclass Correlation ^b | 95% Confidence Interval | | F Test with True Value 0 | | | |
|------------------|-------------------------------------|-------------------------|-------------|--------------------------|-----|-----|------|
| | | Lower Bound | Upper Bound | Value | df1 | df2 | Sig |
| Single Measures | .632 ^a | .218 | .986 | 16.453 | 2 | 16 | .000 |
| Average Measures | .939 ^c | .715 | .998 | 16.453 | 2 | 16 | .000 |

Correlation assessment results by measuring the scale of Intraclass Correlation Coefficient (ICC) of the language in the module assessed by the validator. ICC value obtained from the calculation SPSS Version 22.00 for the presentation at a very high position that is 0.939 from the average analysis of inter-rater agreement, for one rater consistency is 0.632.

This is in accordance with LKS IPA discovery based on curriculum 2013 on any material disaster mitigation overall very worthy used, feasibility in achieved LKS developed at the discovery get very reasonable criteria[9].

Based on the ICC calculation results from the three aspects assessed in the geography module of disaster, it can be presented Table of ICC final analysis results are:

Table 13. Final Validator Appraisal Result on Geographical Module of Disaster

| Aspects | Singel | Average | Description |
|------------------------|--------|---------|-------------|
| Feasibility of Content | 0,494 | 0,907 | Very valid |
| Presentation | 0,640 | 0,955 | Very valid |
| Linguistic | 0,632 | 0,939 | Very valid |
| Average | | 0,934 | Very valid |

After the assessment of disaster geography module based on Intraclass Correlation Coefficient (ICC) is done, it is followed by suggestions and input given by the validator for module perfection. In this Chart presented a written suggestion from three validators:

Table 14. Written Suggestion Validator

| Validator Suggestion Against the Feasibility of Content |
|--|
| EXPERT PLANNING |
| Revision I: 1. In CHAPTER 2, in the exercise need to add a sample problem to seek disaster risk 2. In Chapter 2, the material adds a case of disaster type according to Law No. 24 of 2007 |
| Revision II: 1. Fix by using Geography Education Language so that students easily understand this disaster geography module 2. Provide a concrete example of disaster geography 3. Repair and provide a representative image |
| Revision III: 1. Already in accordance with the input related to disaster geography 2. It is recommended that this research be continued for advanced research schemes |
| EXPERT EDUCATION |
| Revision I: 1. Strengthening disaster geography education in Chapter IV (flood and landslide mitigation) 2. Strengthening disaster geography education in Chapter V (Mitigation of earthquake and tsunami disaster) 3. Strengthen the Faith Education in Chapter X (Faith for Disaster) |
| Revision II: 1. The module instructions are clarified 2. Exercise in the module using easy-to-understand instructions by module users |
| Revision III: 1. The module is in accordance with the rules of Education and can be used in learning lecture geography of disaster 2. This module is suggested to be reproduced in the form of textbook geography subjects disaster |
| EXPERT OF FRIENDSHIP |
| 1. Pay attention to capital letters 2. It is appropriate |

All suggestions, feedbacks and comments provided by the validator consisting of three experts have been made improvements to the disaster geography module.

IV. CONCLUSION

1. The content feasibility variable is very valid and Cronbach's Alpha value is 0.907 value > 0.600, then this module is reliable
2. The presenting variable is very valid and the value of Cronbach's Alpha is 0.955 value > 0.600, then this module is reliable
3. Language variable is very valid and Cronbach's Alpha value is 0.939 value > 0.600, then this module is reliable
4. Module development can be carried out

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