

The Validity Analysis of Economic Enrichment Book Based on Minangkabau Culture for Senior High Schools

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ABSTRACT

This study aims to produce an economic enrichment book based on Minangkabau culture for class X Senior High School. Development activities have been completed based on an analysis of teachers and students needs. For book development, the ADDIE design (Analyze, Design, Develop, Implementation and Evaluation) was used. The development is focused on the user's need for Minangkabau cultural information related to the economic material studied by grade X Senior High School students. The product has been revised based on input from experts and users. The validation results show that the economic enrichment book based on Minangkabau culture is valid with a validity value of 92.62% (very valid).

Keywords: *validity, enrichment book, Economics, Minangkabau culture*

1. INTRODUCTION

There are two major and fundamental things behind this research, namely the availability of books to support the curriculum as well as sources of information and the phenomenon of the morale erosion of the younger generation that is in accordance with culture. Firstly, books are supporting curriculum and a source of information. Books contain information that can be used to find out what happened in the past, present, and possibly the future so that it broadens the readers' horizons and can be a source of inspiration for new ideas [1]. Therefore, books are never separated from learning. Books are always used as teaching materials for learning in schools. Even though currently there are more and more access to information, books are still the main source of teaching material in schools [2], [3].

Secondly, as long with the pace of globalization, many phenomena of the moral erosion of the younger generation are in accordance with the culture of this nation and are replaced by external cultures [4], [5]. The communities most affected by globalization are coastal communities. With the current socio-economic conditions, coastal communities are very vulnerable to cultural diffusion. Parents are busy with their own affairs (farming, trading, fishing, working in factories, or overseas labor) to fulfill their daily needs. With this condition, the cultivation of cultural values in the framework of moral formation cannot be carried out in the family. In addition, the characteristics of coastal communities are more receptive to change [6], [7]. They

will be very easily influenced by foreign cultures, including the young generation in West Sumatra generally and the city of Padang particularly, which are located in the coastal area.

This is a problem that must be resolved immediately by all society elements, especially education. Education must be able to fortify the original Indonesian culture from the attacks of foreign cultures. Therefore, the circulation of books are expected to be integrated with cultural education. An introduction to the noble values of the Indonesian nation and local culture should be listed in books and be used in learning as well as learning enrichment books [8], [9]. With this combination, in addition to learning conducted by the teacher in the classroom, students can increase local cultural knowledge and build character outside the classroom through existing books.

Educational books that are determined based on the scope of authority in quality control, namely text books of lessons and non-text books. Text books are books used to study or explore a subject of knowledge and science technology or a field of study. Meanwhile, non-text textbooks are books that are not used directly as books to study a field of study in educational institutions. Non-text textbooks consist of enrichment books, reference books, and educator manuals. Enrichment books can enrich and improve mastery of science and technology skills, and shape the

personalities of students, teachers, managers of education, and other communities [10].

Enrichment books can be used as a learning material to solve problems that are found due to a lack of understanding or find something that has not been understood. Enrichment books are used both for students and teachers in the learning process. Enrichment books contain materials that can enrich and improve mastery of science technology and skills, shape the personalities of students, educators, education managers, and other communities. This book can certainly be a reference for students, educators, education managers, and other communities [11], [12].

The essence of an enrichment book is a complementary book or enrichment book containing information that complements the main textbook. The intended enrichment is to provide information on certain subjects in the curriculum in wider and or deeper way. This book is not compiled entirely based on the curriculum both in terms of objectives, subject matter and methods of presentation. This book is not mandatory for students and teachers to use in the learning and learning process, but is useful for students who have difficulty understanding certain subjects in the main textbooks [1].

The enrichment book that will be developed in this study is an enrichment book that contains local cultural values. The cultural values contained in this high school economic enrichment book are the Minangkabau cultural values. This culture can be in the form of arts, cultures, language, folklore, philosophy, and so on [12]. The culture that grows and develops in the area must always be maintained to preserve local wisdom.

Minang cultures is a concept of life designed and prepared by the ancestors for their children and grandchildren to achieve a happy life in this world and the hereafter. These teachings aim to form virtuous individuals, cultured and civilized humans. These teachings are usually published and pronounced in the form of *petatah-petitih* and *pantun* which are conveyed by cultureary stakeholders in traditional speeches, in *tambo-tambo* or in certain ceremonies [12]. [13].

Educators in carrying out learning are strived to take advantage of Minangkabau cultural values as a source of learning for students [14]. However, based on the Guidelines for Integrating Minangkabau Natural Culture Education in High School Economics Subjects, there are no books available that can be used by teachers and students to be able to study high school economic material that contains Minangkabau cultural values. The books used are economics books published nationally, such as; Esis, Erlangga or Yudhistira which do not

contain Minangkabau cultural values. The activities of integrating Minangkabau cultural values carried out by the teacher are only limited to the delivery of quotes or adages that they know related to teaching materials only [15], [16].

Therefore, the main reason for this research is to identify the problems faced by high school economics teachers in several schools in teaching economic material with Minangkabau culture. Based on the problems encountered, it is possible to determine the need for high school economics teachers to add economic learning resources with Minangkabau culture. Based on this information, the researcher can develop a high school economic enrichment book with Minangkabau culture. The results of this study are expected to be useful for high school economics teachers as additional literature and learning resources for economic material with Minangkabau culture.

2. MATERIALS AND METHODS

The enrichment book with Minangkabau cultural values was designed using the ADDIE model. ADDIE is an acronym for the stages of the development process which includes: Analyze, Design, Development, Implementation, Evaluation [17], [18]. Therefore, the development procedure carried out follows the ADDIE development model which includes the analysis, design, development, implementation and evaluation stages.

One of the functions of the ADDIE Model is to become a guide in building learning program tools and infrastructure that are effective, dynamic and support learning performance itself. The ADDIE model was chosen because it also has advantages, namely: (1) it is more systematic, supple and flexible because each step contains clear activities and can be adjusted to the research needs, (2) a complete and systematic description of each step, (3) before being tested try the resulting product revised and validated by the expert. In addition, the ADDIE model is carried out preliminary research at the Analyze stage as an early stage of development. Preliminary research can provide a solid basis for the problem formulation process, and formulate the right solution before moving on to the next stage of development.

To obtain validity data of the enrichment book developed, a set of instruments was used the validity has been tested. Validated instruments were used to collect research data at 3 stages of research, namely 1) preliminary research stage, 2) model development stage, and 3) model implementation stage. Instruments that require expert / expert judgment are validated by experts

in their fields, namely economics, education, language, graphics and culture.

The validity value of the instrument was obtained with the help of the program Microsoft Excel with validity categories refers to the following table [19]:

Table 1. Validity Category

Average (\bar{x})	Interpretation
$4 < \bar{x} \leq 5$	Very Valid
$3 < \bar{x} \leq 4$	Valid
$2 < \bar{x} \leq 3$	Less Valid
$1 < \bar{x} \leq 2$	Invalid
$0 \leq \bar{x} \leq 1$	Very Invalid

To determine the tolerance for differences in the validation results of the validator, "Inter-Reter Reliability" is used by calculating the correlation coefficient between classes (Intraclass Correlation Coefficient, ICC) with the following interpretation:

Table 2. ICC Index Interpretation

Average (\bar{x})	Interpretation
< 0.40	Weak
$0.40 - 0.75$	Well
> 0.75	Very well

Next, to measure the degree of agreement of the experts on one item and which can express the level of content validity, Aiken's V content validity coefficient is used with the following formula:

$$V = \sum s / [n (c-1)]$$

Information:

$$S = r - lo$$

Lo = the lowest number of validity assessments (eg. 1)

C = the highest number of validity assessments (eg. 5)

R = number given by the assessor

To interpret the content validity value obtained from the above calculations, the validity classification is used as shown in the validity criteria table below:

Table 3. Criteria for Content Validity

Average (\bar{x})	Interpretation
$0.80 < V \leq 1.00$	Very high
$0.60 < V \leq 0.80$	High
$0.40 < V \leq 0.60$	Medium
$0.20 < V \leq 0.40$	Low
$0.00 \leq V \leq 0.20$	Very low

3. RESULT AND DISCUSSION

This economic enrichment book containing Minangkabau cultural values is validated using a set of instruments by validators who are experts in their fields. These experts are experts in the fields of economics, education, languages, graphics and culture. Based on the result validity test is expected, the enrichment book produced have good quality. The following describes the results of the validity test of the enrichment book:

a. Enrichment Book Validation Results on Content Aspects

Expert assessment of aspects of the enrichment book content, based on five indicator. Recapitulation of expert judgment can be seen in the following table:

Table 4. Results of Expert Assessment of material Aspects / content of the Enrichment Book

No.	Indicator	Expert judgment					Average
		1	2	3	4	5	
1	Match content with title	4	5	5	5	5	4.8
2	Adequacy of Material	4.1	4.7	4.6	5.0	4.4	4.6
3	Suitability of topics with cultural information	4.3	4.0	4.3	4.8	4.5	4.4
4	The effectiveness of writing	4	4	4	4	4	4
5	Serving order accuracy	4.5	4.3	4.2	4.8	5.0	4.6
Average		4.2	4.4	4.4	4.7	4.6	4.5
Aiken V average		0.87					
ICC		0.626					

The average expert's assessment of the content / material aspects of the enrichment book is 4.5 and it is included in the very valid category. The average score of validator agreement is 0.87 which is very high category. Furthermore, the value of consistency the

validator's assessment is in good criteria with an Intraclass Correlation Coefficient (ICC) value of 0.626. Expert suggestions and revision efforts can be seen in the following table:

Table 5. Expert Suggestions for Content Aspects of the Enrichment Book

No.	Suggestion
1.	Check the completeness and description of the material so that it is easy for students to understand
2.	Improve the evaluation section in evaluation so that it shows cognitive, affective and psychomotor evaluations
3.	Check again the description of the material in the book
4.	Adjust between modern financial institutions that are out of sync with the daily habits of the Minang people.
5.	Material related to the economy in the context of Minangkabau culture needs to be added so that it does not only appear in phase 3 or make connections.

b. Enrichment Book Validation Results on the Graphic Aspects

The assessment of the graphic category consists of 7 aspects, namely: book format, product legibility, letters,

color composition, image presentation, table presentation and cover design. Recapitulation of expert judgment can be seen in the following table:

Table 6. Assessment Results of Enrichment Book Graphic Experts

No.	Indicator	Expert judgment		Average
		1	2	
1	Book Format	5.0	5.0	5.0
2	Product Readability	4.6	4.9	4.7
3	Alphabet	4.0	5.0	4.5
4	Color composition	4.0	5.0	4.5
5	Image presentation	4.0	4.3	4.2
6	Table presentation	4.3	5.0	4.7
7	Cover design	4.6	4.6	4.6
Average		4.4	4.8	4.6
Aiken V average		0.91		
ICC		0.611		

The average expert's assessment on the graphic aspects of the economic enrichment book containing Minangkabau cultural values is 4.6 and is included in the very valid category. The average value of the validator agreement is 0.91 in the very high category. Furthermore, the consistency value of the validator's assessment is in good criteria with an Intraclass Correlation Coefficient (ICC) value of 0.611. Suggestions from experts and revision efforts made can be seen in the following table:

Table 7. Expert Suggestions for Enrichment Book Graphic Categories

No.	Suggestion
1.	1. The book is good and ok, but the image quality needs to be improved. 2. It is advisable not to place ads in scientific books
2.	It is recommended that the cover on the book be original image, not cartoon.

c. Enrichment Book Validation Results on Linguistic Aspects

Assessment of linguistic aspects, namely aspects of the suitability of the language of the economic enrichment book with Minangkabau cultural values rule Indonesian. Recapitulation assessment experts can be seen in the following table:

Table 8. Assessment Results of Enrichment Book Language Experts

No.	Indicator	Expert judgment		Average
		1	2	
1	Writing in Books	4.5	4.6	4.6
2	Book Writing Systematics	4.0	4.2	4.2
3	Consistency	4.3	4.5	4.5
4	Language Conformity	4.0	4.0	4.0
5	Punctuation	4.0	4.0	4.0
6	Alphabet	4.0	4.3	4.3
7	Sentence Structure	4.0	4.0	4.0
Average		4.1	4.3	4.2
Aiken V average		0.81		
ICC		0.667		

Average expert assessment of 4.2 and fall into the very valid category. The average value of the validator agreement is 0.81 with a very high category. Furthermore, the consistency value of the validator's assessment is in good criteria with an Intraclass Correlation Coefficient (ICC) value of 0.667. Suggestions from experts and revision efforts made can be seen in the following table:

Table 9. Expert Suggestions for Categories Language Enrichment Book

No.	Suggestion
1.	1. Pay attention to writing foreign terms which should be italicized 2. Check for typing mistakes again
2.	1. Correct the writing of uppercase and lowercase letters 2. Correct writing of prefix words in, to which are merged or separated. 3. Pay attention to the writing of periods and commas punctuation.

d. Enrichment Book Validation Results on aspects of cultural integration

The category of cultural integration is the conformity aspect of cultural information contained in books. Recapitulation expert assessment can be seen in the following table:

Table 10. Results of Expert Assessment for Cultural Integration in Books

No.	Indicator	Expert judgment			Average
		1	2	3	
1	Assessment Instructions	4.0	5.0	5.0	4.7
2	Scope and Material Truth	3.5	4.0	4.0	3.8
Average		3.8	4.5	4.5	4.3
Aiken V average		0.77			
ICC		0.776			

Average rating of 3 experts on the integration of culture in the product research obtained a total average value of 4.3 and fall into the very valid category. The average value of the validator agreement is 0.77 which is very high category. Next, value consistency the validator's assessment is in good criteria as evidenced by the calculation of the intra-class correlation coefficient (ICC) with a value of 0.776. Suggestion revision from validator are shown in the following table:

Table 11. Expert Suggestions for Culture Category

No.	Suggestion
1.	Provide additional information on any cultural information entered.
2.	Add a description to inform the reader what is meant by the Minangkabau petatah-petitih (same as folklore)
3.	Any cultural information that is entered should be enriched with additional, more detailed information so that readers can understand it more easily

The results of the validation in the Enrichment Book contain the values of Minangkabau culture from the aspect of the content with score an average of 4.5, linguistics with a mean score of 4.2, and grammar with a mean of 4.6, are in the very high validity category.

The results of the validation on the aspects of the book content show that the content of the enrichment book is in accordance with KD 3.5, 3.6 and 4.5, 4.6. Formulation of indicators and aim learning is in accordance with the basic competency to be achieved and can make it easier for students to find concepts. The order of presenting the material in the enrichment book can lead students to find economic concepts through knowledge of Minangkabau culture. The activity of making connections can also lead students to the achievement of indicators, by linking existing Minangkabau cultural information with economic concepts, so that it can help students find concepts. This is in line with the opinion of Syawahid which explains that the ability to make connections and linking facts are an important part in generating conclusions from a problem [20]. The learning process is not just memorizing concepts or facts, but is an activity to connect concepts or produce a complete understanding so that the concepts learned will be well understood and not easily forgotten [21].

The validator's assessment of the linguistic and graphic components of the enrichment book with very high validity categories. This shows that the enrichment book is communicative and does not have multiple meanings, the questions asked are clear, consistent in using symbols or symbols. In addition, the pictures and letters used can be observed clearly, the regular layout and the colors used can attract students' attention.

Based on the discussion of the results of the validity test of the enrichment book, it can be concluded that the enrichment book containing Minangkabau cultural values is suitable for use. General discussion that supports the results of the validity test above are:

- a. The results of the validity test have gone through the product evaluation technique proposed by Tessmer [22], which is carried out by experts (expert review) and has also been through discussions with experts in their respective fields of expertise. According to Tessmer, products that are validated by an expert (expert review) have a better resistance level than other techniques. However, products that have been validated by experts still need to be revised, so that the products produced have stronger resistance.
- b. The selection of experts is based on the opinion of Sugiyono [23], that to test the validity of an expert

opinion (expert judgment), a minimum of three people can be used. The more validators used, the better the results will be obtained.

Construct validity is a logical relationship between content validity and consistency [24]. The results of the validity test show that the economist enrichment book contains Minangkabau cultural values that have met the criteria for state of the art knowledge. The aspect of the state of the art is the consistency and relevance between the products produced. Consistency and relevance is found in every product. These results are evidenced by the content and construct validity performed by experts and practitioners.

4. CONCLUSIONS

Based on the results of research and discussion, it can be concluded that an economic enrichment book with Minangkabau culture has been developed in accordance with the ADDIE development design (Analyze, Design, Develop, Implementation and Evaluation). The enrichment book can be used as a reference in economic learning that can help teachers and students increase their knowledge of Minangkabau culture.

The validation results show that the resulting book of economic enrichment with Minangkabau culture is valid. The results are the average validity value of 4.5 for the content aspect, then an average of 4.6 for the graphic aspect, 4.2 for the linguistic aspect and 4.3 for the cultural integration aspect. All the average scores for this aspect are considered very valid criteria.

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