Ethnopedagogy-based Thematic Modules to Improve the Understanding and Cultural Literacy of Elementary School Students

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A B S T R A K

Merosotnya pengetahuan budaya lokal siswa dan menurunnya tingkat pemahaman konsep siswa dalam pembelajaran tematik menjadi permasalahan yang perlu diatasi. Penelitian ini bertujuan untuk mengembangkan modul pembelajaran tematik berbasis etnopedagogi untuk meningkatkan pemahaman dan literasi budaya siswa kelas V Sekolah Dasar. Penelitian ini menggunakan metode R&D dengan mengadopsi model ADDIE yang terdiri dari lima tahap (Analisis, Desain, Pengembangan, Implementasi, dan Evaluasi). Instrumen yang digunakan untuk mengumpulkan data dalam penelitian ini adalah kuesioner. Angket ini diberikan kepada beberapa ahli seperti ahli desain, ahli materi, dan ahli bahasa untuk melihat kelayakan modul serta respon guru dan siswa untuk melihat kepraktisan modul. Kemudian diberikan tes dan angket untuk menguji pengaruh modul pembelajaran tematik berbasis etnopedagogi terhadap pemahaman dan literasi budaya siswa. Data tersebut kemudian dianalisis secara kualitatif dan kuantitatif. Selanjutnya, efektivitas modul dianalisis dengan menggunakan Analisis Varians Multivariat (Manova). Penelitian ini menunjukkan bahwa modul pembelajaran tematik berbasis etnopedagogi memenuhi kriteria sangat layak dengan rata-rata skor 93,61% dari validator desain, 93,26% dari validator materi, dan 91% dari validator bahasa. Selanjutnya dari respon yang diberikan guru diperoleh skor sebesar 92,65% dengan kategori sangat menarik. Kemudian uji coba skala kecil yang dilakukan kepada siswa memperoleh skor sebesar 96,67% dengan kategori sangat menarik. Selain itu modul pembelajaran tematik berbasis etnopedagogi juga mampu meningkatkan pemahaman dan literasi budaya siswa kelas V SD, terbukti dari hasil uji efektivitas produk menggunakan uji Manova yang memperoleh nilai signifikansi sebesar 0,00 < 0,05.

A B S T R A C T

The decline in students' local cultural knowledge and the decline in the level of understanding of students' concepts in thematic learning are problems that need to be overcome. This study aimed to develop a thematic learning module based on ethnopedagogy to enhance understanding and cultural literacy of the fifth-grade elementary school students. This research utilized an R&D method adopting the ADDIE model, which consisted of five stages (Analysis, Design, Development, Implementation, and Evaluation). The instrument used to collect data in this study was a questionnaire. This questionnaire was given to several experts, such as the design experts, material experts, and language experts, to see the feasibility of the module as well as the teachers' and students' responses to see the practicality of the module. Then, a test and a questionnaire were administered to examine the effect of the ethnopedagogy-based thematic learning module on students' understanding and cultural literacy. The data were then analyzed both qualitatively and quantitatively. Furthermore, the effectiveness of the module was analyzed using Multivariate Analysis of Variance (Manova). This study suggested that the ethnopedagogy-based thematic learning module fulfilled the very feasible criteria with an average score of 93.61% from the design validator, 93.26% from the material validator, and 91% from the language validator. Furthermore, from the response given by the teachers, a score of 92.65% was obtained with a very attractive category. Then, the small-scale trial conducted on students obtained a score of 96.67% with a very attractive category. Apart from that, the thematic learning module based on ethnopedagogy was also able to improve the understanding and cultural literacy of the fifth-grade elementary school students, as proven by the results of the product effectiveness test using the Manova test which obtained a significance value of 0.00 < 0.05.

1. INTRODUCTION

Elementary school (SD) serves as the basis for further education (Nurwindasari et al., 2020; Rahmawati, 2018). Contrary to kindergarten, where learning frequently includes games, elementary school is during the early years of education that students first learn about genuine education. At this foundational level, students start to identify different types of information, attitudes, and skills, which turn into learning

objectives. In other words, the development of learning objectives comprises learning outcomes, which include these three components, that are anticipated to be mastered by each student (Wildan, 2017). The use of thematic learning can demonstrate this (Lase, 2019; Sari et al., 2018). Thematic learning is oriented towards learning practices that suit the students' needs and development (Kasmini et al., 2020), and it presents concepts from various subjects in the form of themes (Asbar & Witarsa, 2020; Siregar et al., 2022) which helps students properly absorb learning materials and can boost their learning interest (Banjar et al., 2020). Applying thematic learning can aid students in gaining firsthand experiences and preparing them to be able to find out about different facts they study (Syaifuddin, 2017). Furthermore, the case that thematic learning is preferred for the learning process at the elementary school level since it offers intriguing features for the development of students' learning (Mulyadin, 2016). Depending on the features of the learning, integrated thematic learning should be taught in a variety of ways. Using learning modules is one of them (Fadila & Taufik, 2020).

In the current learning process, there are still many teachers or educators who only teach students through thematic textbooks, while the discussion contained in the textbooks is still arguably minimal in its discussion, while each lesson consists of several subjects combined in thematic learning or the 2013 curriculum, so that learning is still less innovative and creative, and the learning tools by sourcing lessons only rely on teacher books, student books, and makeshift learning media, so that the learning process runs normally without any reciprocity or response from students in learning that is more interesting or more serious in understanding student concepts. In line with the findings who explained that there were still readings on the material studied by students that were less complete and detailed so that few students showed active opinions and asked questions (Mubarak et al., 2021). Then, when viewed from the student books used in schools, thematic learning that leads to local cultural values does not always appear. This is in line with research which states that there is no textbook based on local cultural wisdom of students' Manganan tradition that is used to support student learning (Yuliatin et al., 2022).

Furthermore, it was found that fifth grade elementary school students experienced a number of difficulties in the learning process, including a lack of understanding of Indonesian culture, especially their local culture, causing a shift in students and cultural values. After further investigation, it was found that the majority of students were more familiar with the culture of South Korea than their local culture. South Korea is one of the countries that began to introduce its culture as a global culture because Korean pop, abbreviated as KPOP, is trending in various countries. This quickly has an influence on everyone around the world, including students. This is in line with previous research showing that intense exposure to Korean media contributes to students' greater cultural knowledge related to Korea compared to local culture (Ri'aeni, 2019; Simbar, 2016). Cultural literacy is one of the six basic literacy skills that have been mandated in the GLN as one type of literacy that must be mastered by students to prepare Indonesian human resources for the Industrial Revolution 4.0. However, cultural literacy in school have not run optimally.

Furthermore, the researcher conducted a preliminary investigation of the teaching materials used by teachers and students, which revealed that the book did not contain topics that emphasized students' indigenous cultural values. In addition, it was found that the practice questions in the student book lacked depth, and the activities featured in the book pages did not effectively engage students in learning activities. As a result, students' conceptual understanding of the material was poor, and their desire to read the book was reduced. In addition, the implementation of cultural literacy in elementary schools was also found to have not produced significant results (Sugara & Sugito, 2022).

Therefore, using ethnopedagogy-based thematic modules is an ideal way to solve the above problems. Modules are a type of educational material that, when used properly, can improve the level of learning because they are tailor-made to address real-world problems. Teachers can develop teaching modules. In order to support learning activities that incorporate materials, techniques, and evaluations structured in a systematic and appealing manner with the purpose of acquiring the needed skills, modules are essentially instructional materials that are systematically arranged (Nilasari et al., 2016; Lasmiyati & Harta, 2014). Through activities and communicative language, learning modules are designed with the intention of assisting students in learning on their own (Lestari et al., 2022; Fitriani & Setiawan, 2017). The fact that the module contains self-study instructions lends credence to the claim that it is independent (Susilo et al., 2016). Utilizing the module is quite useful for the teaching and learning process. According to research conducted by (Fajri & Khumaedi, 2016) the learning module has a positive impact on students' knowledge, attitudes, and skills. This is demonstrated by the considerable difference in increasing scores. Additionally, the creation of modules can aid students in their learning and should be customized to their individual needs. Modules can be formulated as complete units that stand alone and consist of a series of learning activities that are arranged to assist students in achieving specific and clearly formulated goals (Mubarak et al., 2021).

The novelty of this research is to develop an ethnopedagogy-based thematic module. The thematic module that will be developed contains material that can instill cultural values in the local area of students, such as elements of Malay Riau culture. In addition to containing cultural values, this thematic module is designed in an attractive, interactive manner with complete features and components. So that ethnopedagogy-based thematic modules have the potential to improve the concept understanding and cultural literacy of elementary school students. Therefore, researchers offer a problem-solving solution, namely developing ethnopedagogy-based thematic learning modules to improve the understanding and cultural literacy of grade V elementary school students. The purpose of this research is to produce an ethnopedagogy-based thematic module for improving elementary school students' concept understanding and cultural literacy.

2. METHOD

This study was research and development, and the goal was to design an ethnopedagogy-based thematic learning module for elementary school students at the fifth grade. The ADDIE model was used by the researchers to create the module in this study. The ADDIE learning paradigm is a five-phase learning process that includes dynamic analysis, design, development, implementation, and evaluation. However, this study only describes the four stages, namely the design, development, implementation, and evaluation stages. The needs analysis stage is not presented in this study because the needs analysis stage of the ethnopedagogy-based thematic learning module has been studied previously in other journals. The ADDIE model is used because it offers the opportunity to continuously review and change throughout each phase, culminating in a valid, practical, and effective product (Hidayat & Nizar, 2021). Data in this study were classified as primary and secondary data. The researchers used tests, questionnaires, validation sheets, and documentation as the instruments to gather the data. The data were then analyzed both qualitatively and quantitatively. A Likert scale was used to evaluate the validation questionnaire that was distributed to material experts, language experts, design experts, and teachers. Meanwhile, a response questionnaire that used to gather data about how the students responded to the module was analyzed using the Guttman scale. The Guttman scale, according to (Riduwan, 2016) was applied to evaluate responds that were both unambiguous (firm) and consistent. The criteria are employed to determine the validation results is presented in Table 1.

Table.1 The Level of Product Validity and Revision

Percentage (%)	Validity Criteria
76-100	Valid (without revision)
56-75	Quite valid (without revision)
40-55	Less valid (revision)
0-39	Invalid (revision)

(Listiawan, 2016)

Furthermore, the instrument grids for validation sheets for design experts can be seen in Table 2, material experts can be seen in Table 3 and linguists can be seen in Table 4.

Table 2. Instrument Grids for Design Experts

No.	Assessment Aspect	Indicator	Item No
1.	Creation	a. Writing form	1
		b. Writing color	2
		c. Font size	3
		d. Writing color composition	4
		e. Image shape	5
		f. Image selection	6
		g. Color with background writing	7,8
		h. Module effectiveness	9
2	Procedure	a. Ease of use of the module	10
		b. Ease of module storage	11
3	Rules	a. More interesting learning process	12
		b. Module content is easy to understand	13
		c. Ease of learning process	14

Table 3. Instrument Grid for Material Experts

No.	Assessment Aspect	Indicator	Item No
1.	Relevance of the material	a. Suitability of the material with the lesson plan	1
		b. Suitability of material with learning objectives	2
		c. Suitability of material with basic competencies	3,4
		d. Completeness of material	5
		e. Sequence of material	6,7
		f. Writing format	8
		g. Accuracy of image selection	9,10,11
		h. Module illustration	12
		i. Component drawings are easy to understand	13
		j. Accuracy of animation in explaining the material	14
		k. Sequence of material	15
2	Benefits	a. The material is easy to understand	16

Table 4. Instrument Grid for Linguists

No.	Assessment Aspect	Indicator	Item No
1	Straightforward	The language used is straightforward	1,2
2	Conformity with language rules	Accuracy of language	3,4
3	Use of terms	Use of terms that are in accordance with the concepts on the subject matter	5
4	Communicative	Understanding of the message or information	6,7
5	Appropriateness to student development	Suitability to the intellectual development of students	8
6	Orderliness and cohesiveness of thought	Sequence and integration between learning activities	9
7	Dialogical and interactive	Ability to encourage critical thinking	10

Then, the module practicality test analysis was carried out by providing questionnaires for students and teachers. The criteria for the level of practicality use the criteria in Table 5.

Table 5. Criteria for the Practicality Level of Ethnopedagogy-based Thematic Modules

Score Range	Category
90 – 100	Very high
75 – 89	High
65 – 74	Fair
55 – 64	Low
0 – 54	Very low

(Koyan, 2012)

The criteria for accepting the level of practicality of the model developed according to the expert are at least the level of practicality obtained at the "Fair" level. If it is still not achieved, revisions will be made based on expert input and suggestions. Furthermore, the grids of response questionnaire instruments for teachers can be seen in Table 6 and students can be seen in Table 7.

Table 6. Teacher Questionnaire Grid

No	Assessment Aspect	Indicator	Item No
1	Material Organization	a. Clarity of material content	1
		b. The attractiveness of the material content	1
		c. Completeness of material content	1
		d. Ease of understanding the material	1
2	Evaluation or Practice Questions	a. The suitability of the questions with the learning material	1
		b. Clarity of work instructions	1
		c. Affordability of the level of difficulty of the problem	1
3	Module Teaching Material Products	a. Ease of use	1
		b. Clarity of use of instructions	1
		c. Attractive appearance	1

No	Assessment Aspect		Indicator	Item No
		d.	Appropriateness of the selection of font type and size	1
		e.	The level of attractiveness of image illustrations, animations on the module display	1
		f.	Appropriateness of background selection	1
		g.	Appropriateness of color selection	1
		h.	Appropriateness of image and animation presentation	1
4	Effects for Users	a.	Add insight and knowledge of learners	1
		b.	Provide support for the exercise of learner independence	1
		Total		**17**

Table 7. Learner Questionnaire Grid

No.	Assessment Aspect		Indicator	Item No
1	Presentation aspect	a.	Attractive appearance	1
		b.	Clarity of use of instructions	1
		c.	Easy to understand language	1
		d.	Support in understanding the flow of material	1
		e.	Encourages curiosity	1
2	Language Aspect	a.	Clarity of instructions for using the module	1
3	Learning Aspect	a.	Relevance of examples in everyday life	1
		b.	Clarity of the examples given	1
		c.	Appropriateness of evaluation with learning material	1
4	User aspects	a.	Add insight and knowledge of students	1
		b.	Provides support for learner independence training	1
		Total		**11**

Furthermore, the effectiveness of the module was analyzed using Multivariate Analysis of Variance (Manova). There were several requirements that must be fulfilled and need to be proven before conducting hypothesis testing. Those requirements were that the data should be normally distributed and homogeneous. To fulfill these two requirements, an analysis prerequisite test was conducted by performing a normality test and a homogeneity test. The normality test was executed using SPSS 24.00 with the Shapiro Wilk statistical test at a significance of 0.05, while the homogeneity test of variance in this study was carried out using the Levene's Test of Equality of Error Variance with the help of SPSS through the Box's M test. After that, the three hypotheses were examined by Multivariate Analysis of Variance (Manova). Hypotheses 1 and 2 were tested by the F variant test through Manova analysis using the Test of Between Subject Effects with a significance level of F = 5%. This test was assisted by SPSS 28.00 for windows. On the other hand, Hypothesis 3 was tested by the F test through decisions taken by the analysis of Pilae Trace, Wilk Lambda, Hotelling's Trace, Roy's Largest Root, with a significance level of F = 5%. If the significance value of F calculated was less than 0.05, the null hypothesis was rejected and Ha was accepted.

3. RESULT AND DISCUSSION

Result

The objective of this study was to develop a thematic module based on ethnopedagogy to improve the fifth-grade students' understanding of the materials and cultural literacy. Accordingly, the description of the research findings is as follows.

Desain

The module design is adjusted to the results of the needs analysis that has been carried out. The needs analysis includes: 1) Curriculum analysis, the curriculum applied in the elementary school where the research was conducted is the 2013 curriculum. Fifth grade students apply thematic learning, then the themes and subthemes used as research are Theme 4 "Healthy is Important" subtheme 1 "My Blood Circulation is Healthy". The selection of the theme and subtheme was used as research material because it was in accordance with the needs of the next learning material; 2) Teacher needs analysis, from the analysis, it was found that teachers need teaching materials that can meet the learning needs of students individually and in groups but adapted to the environment around students. This is because so that students know the ethnopedagogy that exists in their area so that students love and are proud of the potential and culture of their region; and 3) Analysis of student needs, this analysis concluded that the module design must adjust

the needs of students such as books that have elements of Malay culture, then students like thematic modules that are rich in colors and have interesting pictures.

This module was designed to encourage students to get to know and understand their local culture, especially Malay. It was equipped with colors, pictures, and interesting materials for students. In this module, the ethnopedagogical elements were reflected in the selection of pictures, colors, and several sentences in the contents of the module, especially on the materials about poems. The parts of this ethnopedagogy-based thematic module included a cover, a preface, a table of contents, the lessons, and the answer keys. Figure 1 show some pictures of the content of the module.

Figure 1. Content of the Ethnopedagogy-Based Thematic Module

Development

In this study, the data obtained at this stage include the results of the validation of ethnopedagogy-based thematic learning modules by six (six) experts, consisting of 2 (two) design experts, 2 (two) material experts and 2 (two) language experts. The results of this module validation can be described as in Table 8.

Table 8. Ethnopedagogy-based Thematic Learning Module Validation Results

Validators	Percentage			
	1st Validation	Average 1st Validation	2nd Validation	Average 2nd Validation
Design Expert Validation				
Validator 1	50.32%	65.68%	89.14%	93.61%
Validator 2	81.03%		98.08%	
Material Expert Validation				
Validator 3	75%	77.75%	90.87%	93.26%
Validator 4	80.5%		95.65%	
Linguist Validation				
Validator 5	60.5%	67.5%	90%	91%
Validator 6	74.5%		92%	

Table 8 displays the validation results of ethnopedagogy-based thematic learning modules from design experts, material experts and language experts. First, based on the results from design experts in Validation 1 and Validation 2. Based on Validation 1 data, the average percentage score from Validator 1 and Validator 2 is 65.68%. This result was categorized into the "Quite Valid" category when it was translated into qualitative data. Then, after revising the module based on the recommendations and feedback from the results of first validation, a second validation was conducted. Based on the results of validation 2, it was discovered that the design of the ethnopedagogy-based thematic learning module was classified as "Valid" without any revisions with an average score of 93.61%. Second, the validation results of the thematic learning module based on ethnopedagogy were obtained from material experts in Validation 1 and Validation 2. Data obtained from validation 1 showed that the average percentage of scores obtained from validator 3 and validator 4 was 77.75%. When converted into qualitative data, aspects of the content/material of this module are categorized into the "Valid" category. Furthermore, after the module was revised based on suggestions and comments from the results of the first validation, a second validation was carried out. Based on the results of Validation 2, it is known that the material contained in the thematic learning module based on ethnopedagogy is classified as "Valid" without any revisions with an average percentage of 93.26%. Next Third, the validation results of the thematic learning module based on ethnopedagogy were obtained from linguists in Validation 1 and Validation 2. Based on the data obtained from Validation 1, it was revealed that the percentage of the average score achieved from Validator 5 and Validator 6 was 67.5%. When converted into qualitative data, the language aspects in this module fell into "Quite Valid" category. Then, after the ethnopedagogy-based thematic learning module was revised based on the suggestions and comments obtained from the results of the first validation, a second validation was

performed. The data obtained from validation 2 revealed that the language aspects of the ethnopedagogy-based thematic learning module were included in "Valid" category with an average percentage of 91%.

Implementation

After examining the validity of the module by design experts, material experts, and language experts, this study also analyzed the teachers' and students' responses. There were two teachers and six students were participated in this study. The responses given by teachers and students are displayed in Table 9 and Table 10.

Table 9. Responses of Grade V Teachers

No	Indicators	Teacher I	Teacher II
1	Material Organization	95%	95%
2	Evaluations and Exercises	90%	90%
3	Module Products	100%	95%
4	Effects for Users	85%	93,5%
Average		**92.5%**	**93.4%**
		92.95%	
Category		**Very High**	

Table 9 demonstrates that the average percentage given by the grade V teachers is 92.95% with a category of "Very Attractive". This result was in line with the opinion from the teachers saying that this module attracted the students' attention to learn; it also boosted the students' enthusiasm to learn. In order to get feedback from the students on this ethnopedagogy-based thematic learning module, the researchers also conducted an assessment. The outcomes of the students' responses are shown in Table 10.

Table 10. The Fifth-Grade Students' Responses

No	Name	Score	Maximum Score	Percentage	Category
1	MAD	10	10	100%	Very high
2	ASM	9	10	90%	Very high
3	MAR	10	10	100%	Very high
4	AF	9	10	90%	Very high
5	IKS	10	10	100%	Very high
6	MS	10	10	100%	Very high
Total Score		**56**	**60**	**96.67%**	**Very High**

Table 10 demonstrated the results of limited scale field trials involving 6 students. This table showed that the total score obtained by the students was 58, from the maximum score of 60. It was further noted that the average percentage of the students' responses from this limited scale trial was 96.67% with the criteria of "Sangat Tinggi". This was in line with the opinions given by the students when participating in small-scale trials. They admitted that this ethnopedagogy-based thematic learning module was very attractive to be applied in the learning process.

Evaluation

Prior to the hypothesis testing, the researchers conducted several prerequisite tests, namely the normality test and homogeneity test, to analyze the score of students' understanding and cultural literacy. The first step was to perform a normality test which aimed to measure whether the data were normally distributed so that they could be used in parametric statistics. The normality test was performed using Shapiro Wilk, by looking at the value of Shapiro wilk and its Asymp. Sig. The criterion for accepting normality was if the calculated significance value was greater than $\alpha = 0.05$, the data distribution was normal. Conversely, if it was less than $\alpha = 0.05$, the data distribution was declared abnormal. The summary of the data normality test results is displayed in Table 11.

Table 11. Results of Normality Test

Variables	Class	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Understanding	Experiment	0.158	25	0.110	0.955	25	0.316
	Control	0.160	25	0.098	0.932	25	0.099

Variables	Class	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Cultural Literacy	Experiment	0.103	25	0.200	0.967	25	0.573
	Control	0.153	25	0.134	0.943	25	0.170

Results presented in Table 11 show that the significance value of this normality test is greater than α = 0.05. Thus, it can be concluded that the overall data in the control group and the experimental group are normally distributed. In this study, the variance between the experimental group and the control group was subjected to the homogeneity test. With the aid of SPSS and the Box's M test, the Levene's Test of Equality of Error Variance was implemented to examine the homogeneity of variance in this study. The score of Box's M is 4.577 (p = 0.224), in which the value is 0.224 > 0.05, so it can be concluded that the covariance matrix between groups is assumed to be the same or homogeneous. Based on the prerequisite tests of the data analysis, it was found that the post-test results of the experimental and control groups were normal and homogeneous. After obtaining the results of the prerequisite test, the researchers examined the research hypothesis. The Hypotheses 1 and 2 were examined using the F variant test, which was carried out using Manova with Test of Between Subject Effects with a significance level of F = 5%. If the significance value of F calculated was less than 0.05, the null hypothesis was rejected and Ha was accepted. The test calculations are presented in Table 12.

Table 12. Test Results of Between Subjects Effects

	Tests of Between-Subjects Effects						
Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected	Understanding	1740.50	1	1740.50	56.66	0.00	0.541
Model	Cultural Literacy	1556.82	1	1556.82	64.66	0.00	0.574
Intercept	Understanding	304044.02	1	304044.02	9897.80	0.00	0.995
	Cultural Literacy	310314.42	1	310314.42	12887.70	0.00	0.996
Group	Understanding	1740.50	1	1740.50	56.66	0.00	0.541
	Cultural Literacy	1556.82	1	1556.82	64.66	0.00	0.574
Error	Understanding	1474.48	48	30.72			
	Cultural Literacy	1155.76	48	24.08			
Total	Understanding	307259.00	50				
	Cultural Literacy	313027.00	50				
Corrected	Understanding	3214.98	49				
Total	Cultural Literacy	2712.58	49				

The results of data processing shown in Table 12 was described as follows. In the First Hypothesis, the score of F calculated was 56.660, df = 1, and sig = 0.000 <0.05. This indicated that the significance was < 0.05. Thus, the null hypothesis (H_o) was rejected and the alternative hypothesis (H_a) was accepted. Based on the results of the first hypothesis analysis, there was a significant difference in the understanding between students in the experimental class, who were taught with the ethnopedagogy-based thematic learning module, and students in the control class, who were taught with direct learning without using the ethnopedagogy-based thematic learning module. Looking at the research data, it was suggested that theoretically the ethnopedagogy-based thematic learning module was effective for increasing the understanding in the learning process

Furthermore, the results in the Second Hypothesis showed that the score of F calculated was 64.656, df = 1, and sig = 0.000 < 0.05. This indicated the significance was <0.05. Thus, the null hypothesis (H_o) was rejected and the alternative hypothesis (H_a) was accepted. Based on the results of the second hypothesis analysis, it was concluded that there was a difference on the cultural literacy between students in the experimental class, who were taught with the ethnopedagogy-based thematic learning module, and students in the control class, who were taught with direct learning without using ethnopedagogy-based thematic learning modules. Looking at the research data, theoretically it was suggested that the ethnopedagogy-based thematic learning module were effective for increasing students' cultural literacy in the learning process.

The Third Hypothesis was examined by the F test through decisions taken by the analysis of Pilae Trace, Wilk Lambda, Hotelling's Trace, and Roy's Largest Root, with a significance level of F = 5%. If the

score of F calculated was less than 0.05, the null hypothesis (H_o) was rejected, and H_a was accepted. The test calculations are presented in Table 13.

Table 13. Multivariate Test Results

Parameters	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's trace	0.742	67.517	2.000	47.000	0.000	0.742
Wilks' lambda	0.258	67.517	2.000	47.000	0.000	0.742
Hotelling's trace	2.873	67.517	2.000	47.000	0.000	0.742
Roy's largest root	2.873	67.517	2.000	47.000	0.000	0.742

Table 14 shows the results of the F calculated of Pilae Trace (F calculated = 65.517), Wilk Lambda (F calculated = 65.517), Hotelling's Trace (F calculated = 65.517), and Roy's Largest Root (F calculated = 65.517); all of them has a significance of 0.000 < 0.05, so the null hypothesis (H_o) was rejected and the alternative hypothesis (H_a) was accepted. Thus, based on the analysis of the third hypothesis, there was a significant difference in understanding and cultural literacy between students who were taught with the ethnopedagogy-based thematic learning module (the experimental class) and students who were taught with direct learning without using the ethnopedagogy-based thematic learning module (the control class). This result theoretically indicated that the ethnopedagogy-based thematic learning module had better and more effective effect for increasing students' understanding and cultural literacy in the learning process.

Discussion

This research and development produces products in the form of ethnopedagogy-based thematic learning modules to improve the concept understanding and cultural literacy of grade V elementary school students. In this study, the development was carried out by conducting a formative evaluation commonly referred to as the validity test. Validity is the process of evaluating the product design developed by a team of competent experts in their fields. The purpose of conducting a validity test is to find out whether the product is valid to be used as teaching material or not. In this study, there were six experts who became validators in the development of ethnopedagogy-based thematic module products. Two validators are experts who evaluate design, two other experts who evaluate the content of the material, and two other experts who evaluate the linguistic aspects. From the overall assessment of the six validators, the ethnopedagogy-based thematic module obtained valid results without revision and qualified very well. This ethnopedagogy-based thematic learning module was developed to accommodate the demands of students in terms of skill development and deepening understanding of subject matter and local culture in the region, especially Riau Province. These results support the statement that ethnopedagogy-based modules are learning resources that students use independently with little help and direction from the teacher (Saragih & Ramadan, 2021).

Furthermore, a limited-scale field trial involving two teachers and six students was conducted. It was found that this ethnopedagogy-based thematic learning module was the result of a limited-scale field trial involving six students. Based on the results, the average percentage of student responses from this limited-scale trial was 96.67% with the "very high" criteria, and the percentage given by the fifth-grade teacher was 92.95% with the "very high" category. Therefore, this ethnopedagogy-based thematic learning module is very interesting to apply in the learning process and provides meaningful learning for students. Meaningful learning refers to a learning process that connects newly acquired information and knowledge gained by students from their experiences (Baharuddin, 2020; Kumar, 2023). Therefore, the learning process using this ethnopedagogy-based thematic module aims to connect concepts or facts to develop a comprehensive understanding (meaningful learning), not just memorizing (root learning), but to ensure that the concepts are well understood and not quickly forgotten (Gazali, 2016); Samad et al., 2021).

Besides, the goal of this type of instruction was to increase students awareness of local cultural norms. This is supported by the findings of a study, which shows that ethnopedagogy in thematic learning allows students to find future ideals related to the type of work they want, implying that students feel proud of the local wisdom they have, and this reflects the realization of students to preserve local wisdom in their area so that it is hoped that students understand and love their local wisdom more (Oktaviani & Ratnasari, 2018). This perspective is further claiming that education today should be viewed as an effort to transmit cultural values from the older to the younger generations so that these values can continue to evolve in society (Ilahi, 2016; Offorma, 2016). Furthermore, that these outside influences cause children in this nation to lose their moral foundation and sense of identity (Wafiqni & Nurani, 2018; Irmania et al., 2021). Due to these factors, (Deviana, 2018; Dewanti et al., 2023) contends that thematic learning modules based on local wisdom are necessary to acquaint students with their neighbourhood and help them develop attitudes that are consistent with its values. This is in line with the constructivism theory initiated by Vygotskian, who

believes that knowledge is created through a process of cognition that is guided by intellectual adaptation in a sociocultural setting (Rohsiah, 2019; Ameri, 2020). Similar research conducted by (Divan, 2018) suggests that instructional materials like thematic modules that are created in accordance with the preferences and cultures of the students, situated close to the students' surroundings, and equipped with appealing images have a high effectiveness. This is based on the involvement of the students in the learning process and the accomplishment of learning objectives, which are traditionally assessed by the thoroughness of the students' learning outcomes. Additionally, it was demonstrated that the ethnopedagogy-based thematic learning module developed in this study might enhance students' comprehension of the material and cultural literacy. This is consistent with (Ngilmiah et al., 2022; Leksono et al., 2015), who state that ethnopedagogy-based learning modules can increase learning effectiveness since they give students a better understanding of the local knowledge around them, help them understand the material being presented, and make learning more interesting and enjoyable for them. Learning by using real-world contexts and the integration of various sciences will affect students' mastery about concepts (Glynn & Winter, 2004). Therefore, teachers must be able to improve the mastery of students' competence while still paying attention to students' cultural backgrounds (Sugara & Sugito, 2022).

The implication of this research and development is that the ethnopedagogy-based thematic learning module can be used in thematic learning in grade V elementary school because it contains material from the 2013 curriculum, and this thematic module can help teachers deliver learning materials to students. The ethnopedagogy-based thematic module can also attract students' interest and motivation in participating in learning activities, improve students' concept understanding, and increase their cultural literacy towards the local wisdom of the Malay Riau region. Given that the results of research and development products can provide benefits for learning, it is recommended that teachers use them in thematic learning for grade V elementary schools so that it will make it easier for students to understand the material presented, and it is hoped that teachers or prospective teachers can develop this product with a wider scope or on other materials, even on other subjects in the future.

4. CONCLUSION

Based on the results of the research and discussion above, it can be concluded that this ethnopedagogy-based thematic learning module is suitable for use as a variety of teaching materials in thematic learning for grade V elementary schools because this ethnopedagogy-based thematic module has met the validity of the valid category and is then categorized as very practical for use in the learning process and effective for improving students' concept understanding and cultural literacy. The ethnopedagogy-based thematic module can also attract students' interest and motivation in participating in learning activities, improve students' concept understanding, and increase their cultural literacy towards the local wisdom of the Malay Riau region. Given that the results of research and development products can provide benefits for learning, it is recommended that teachers use them in thematic learning for grade V elementary schools so that it will make it easier for students to understand the material presented, and it is hoped that teachers or prospective teachers can develop this product with a wider scope or on other materials, even on other subjects in the future.

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