Sociology Learning Module Based on Local Wisdom to Strengthen School Culture: A Qualitative Study from the Sociology Perspective

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ARTICLE INFO	ABSTRACT
Keywords: Sociology Education Local Wisdom School culture, Learning module	**Purpose –** This study aims to develop a sociology learning module based on Bugis–Makassar local wisdom to strengthen school culture and internalize cultural values among eleventh-grade students at Madrasah Aliyah Swasta DDI Baru-Baru Tanga, Pangkep. The research addresses instructional limitations in existing materials that lack contextualization, cultural relevance, and the integration of local wisdom into sociology learning. **Methodology –** The study employed a qualitative development approach, utilizing Borg & Gall's (1983) model, which encompassed needs analysis, module planning, expert validation, revision, and limited field testing. Thirty students participated in the module trial. Data were collected through questionnaires, observations, and interviews, then analyzed descriptively to assess clarity, content relevance, cultural integration, student engagement, and value internalization. **Findings –** The module was found to be clear, systematic, and easy to understand (average score 4.3). It successfully links sociological concepts with students' prior knowledge and daily experiences (4.1), integrates key Bugis–Makassar values such as *siri' na pacce*, *sipakatau*, and *getteng* (4.5), encourages active participation (4.2), and supports the internalization of character-based cultural values (4.0). Overall, the module bridges abstract sociological theory with students' socio-cultural realities while reinforcing school culture and social character. **Contribution –** This study contributes to the development of culturally integrated and contextually relevant sociology learning materials. The module functions not only as an academic resource but also as a medium for character education rooted in local wisdom. It further demonstrates the effectiveness of the Borg & Gall model in producing high-quality instructional materials suited to students' cultural contexts.

INTRODUCTION

Education is fundamentally a social process that not only transmits knowledge but also shapes identity, character, and social awareness through interactions within the school environment. Durkheim (1912) argues that education serves as a mechanism for maintaining collective cohesion, while Parsons (1951) views schools as institutions that prepare individuals to participate in the broader social system. These classical views are reinforced by recent international studies, which show that culturally grounded education strengthens students' identity formation and civic engagement (Gay, 2018; Ladson-Billings, 2021). In the Indonesian context, schools play a dual role: facilitating academic learning and cultivating local cultural values that influence students' worldview and social behavior. Therefore, learning—especially sociology learning—must incorporate the cultural and social realities that students encounter daily to ensure relevance and meaningful understanding.

However, sociology learning in Indonesian schools continues to face significant challenges. Prior research (Sardiman, 2018; Winataputra, 2017) and international findings (Schweisfurth, 2019; Banks, 2020) show that social science instruction is often abstract, verbalistic, and disconnected from students' cultural contexts. Preliminary observations in this study reveal that sociology material is still taught normatively using national textbooks, with little effort to contextualize core concepts—such as values, norms, socialization, stratification, or social change—within students' lived experiences. Interviews with three sociology teachers showed that approximately 78% of students struggled to relate sociological theories to real-world social situations. These challenges confirm the need for a more contextual, meaningful, and culturally responsive approach aligned with constructivist principles and supported by international evidence (Au, 2012; Bennett, 2021).

The Bugis–Makassar region possesses rich local wisdom that offers strong potential for meaningful integration into sociology instruction. Cultural values such as *siri' na pacce*, *lempu*, *getteng*, and *reso* serve not only as moral guidelines but also as forms of social practice directly connected to sociological concepts, including solidarity, social control, social interaction, and social structure. Both national (Tilaar, 2015; Rahim, 2020) and international research (Smith & Riley, 2022; Geertz, 2020) demonstrate that culture-based education significantly enhances students' cultural identity and social literacy. However, most of these studies focus broadly on social studies or character education rather than sociology as a discipline with its own conceptual rigor. Furthermore, existing studies on Bugis–Makassar culture remain primarily descriptive and anthropological, without being transformed into structured instructional materials for high school sociology.

This situation shows a clear *research gap*. To date, no study has developed a structured sociology learning module based on Bugis–Makassar local wisdom that aligns with modern sociological concepts and the requirements of the Indonesian Merdeka Curriculum. Previous research often describes cultural values without converting them into systematic learning materials that incorporate activity-based learning, assessment strategies, project-based learning, and higher-order thinking skills. This gap presents an opportunity to make a significant scholarly contribution.

The novelty of this study lies in four key aspects are 1) developing a sociology learning module based on Bugis–Makassar local wisdom using the systematic Borg & Gall model, not merely cultural enrichment, 2) integrating local cultural values directly with core sociology concepts such as social norms, values, interaction, social structure, and solidarity, 3) aligning the module with the *Merdeka* Curriculum, including *Pancasila* Student Profile projects and activity-based learning, providing empirical evidence from a limited trial, demonstrating improved conceptual understanding, learning relevance, student engagement, and cultural value internalization, and 4) the limited trial involving 30 eleventh-grade students revealed encouraging results are 86% of students reported that the module was easier to understand because it connected concepts to real-life contexts, 82% showed increased engagement through group discussions, cultural case studies, and social observation tasks, 78% successfully connected sociological concepts to cultural values such as *siri' na pacce*, *sipakatau*, and *getting*, teachers stated that the module made abstract sociological concepts more concrete and relatable, and classroom observations showed increased cooperative behaviors and active participation.

These empirical findings are consistent with international research that emphasizes the importance of

culturally responsive teaching in the social sciences (Nieto, 2022; Arizpe & Styles, 2020), supporting the demands of 21st-century learning that require cultural literacy and context-based social analysis.

Considering this urgency, the present study aims to develop a Bugis–Makassar local-wisdom-based sociology learning module that is valid, practical, and feasible in improving students' conceptual understanding and sociological analysis skills. This objective not only addresses real classroom challenges but also fills a gap in existing scholarship, providing a significant contribution to culturally grounded sociology education.

To achieve this aim, the study is guided by the following research questions: (1) What are the instructional needs and existing conditions of sociology learning that support the development of a Bugis–Makassar local wisdom–based module? (2) How can such a module be systematically developed in accordance with the Merdeka Curriculum? (3) To what extent is the resulting module valid, practical, and feasible for improving the quality of sociology instruction?

METHODOLOGY

Research Design

This study employed a qualitative research design within a Research and Development (R&D) framework to develop and validate a Sociology learning module based on Bugis–Makassar local wisdom. Although R&D is commonly implemented using a combination of quantitative and qualitative methods, this study deliberately adopted a qualitative approach because its primary objective is to gain an in-depth understanding of the social context, students' needs, and teachers' perspectives, which serves as the foundation for module development. A qualitative orientation is considered appropriate for exploring meanings, experiences, and the relevance of local cultural values—elements that cannot be fully captured through quantitative instruments.

The development model, as described by Borg & Gall (1983), consists of several stages: initial research, product planning, draft development, expert validation, revision, and limited field testing. In this study, these stages were adapted to emphasize qualitative exploration, particularly in identifying needs, evaluating cultural contexts, and interpreting classroom practices. The use of qualitative data allowed the researcher to ensure that the developed module was closely aligned with classroom realities and the school's cultural environment.

The qualitative R&D approach aligns with the perspective of Creswell & Poth (2018), who argue that educational product development grounded in social context necessitates a deep interpretive understanding. Likewise, Rahim (2021) asserts that integrating local cultural values into learning necessitates a phenomenological analysis of social practices and the values embedded within the community. Therefore, although this study adopts a qualitative orientation, it still meets the methodological standards of educational product development because it maintains systematic procedures, expert validation, and data-based revisions, while emphasizing contextual quality, cultural meaning, and instructional relevance.

Participant

This study involved 30 students from Grade XI at Madrasah Aliyah Swasta DDI Baru-Baru Tanga, Pangkep Regency, selected through purposive sampling. The number of 30 students is considered adequate for a limited trial, as it aligns with recommendations for *small-scale formative evaluation*, in which 20–30 participants are sufficient to identify product weaknesses, assess content clarity, and evaluate initial feasibility before conducting large-scale testing (Patton, 2015; Nieveen, 2014). This sample size also allows the researcher to capture a range of responses without generating a massive dataset for analysis during the early formative stage.

The characteristics of the students are considered representative because they reflect diverse academic abilities, varied social backgrounds, and different learning experiences. Such heterogeneity is methodologically important to examine how the module functions across different user profiles. All

participating students were currently enrolled in Sociology, making them relevant primary users who could provide authentic feedback on content clarity, contextual relevance, and the effectiveness of learning activities.

In addition, the study involved two Sociology teachers as key informants. Both teachers have 8–12 years of teaching experience, giving them substantial insight into students' characteristics, instructional needs, and curriculum implementation. Their professional experience positions them as credible evaluators of the module's pedagogical quality. The teachers contributed to the research in several important ways:

1. Expert validation during the initial development phase, particularly regarding curriculum alignment, pedagogical feasibility, and the accuracy of integrating local values.
2. Evaluation of instructional feasibility, including clarity of instructions, comprehensibility of learning activities, and the appropriateness of content difficulty for students.
3. Providing detailed recommendations for revision, both substantive and technical, which guided the iterative refinement of the module.

The involvement of teachers in both validation and evaluation processes ensured that the module is not only academically relevant but also practical and implementable within real classroom conditions.

Data Collection

Data were collected from 30 participating students using multiple instruments to ensure triangulation and enhance the validity of the study. The instruments included classroom observations, interview sheets, documentation, and questionnaires. Primary data were obtained through classroom observations, in-depth interviews with students and teachers, and field notes recorded during the teaching and learning process. Additionally, a questionnaire was administered to gather students' perceptions regarding the clarity of the material, their level of engagement, and the ease of use of the trial module. The questionnaire contained both closed-ended and open-ended items, allowing the researcher to obtain more measurable and comprehensive responses. Secondary data consisted of school documents, existing Sociology textbooks, curriculum guidelines, and previous instructional materials. During the limited trial of the module, students' interactions, engagement, comprehension, and questionnaire responses were systematically recorded and analyzed to assess the module's effectiveness and identify areas that needed refinement (Sulastri & Arif, 2023; Fauzan et al., 2023).

Instrument

The instruments in this study consisted of structured observation guides, semi-structured interview protocols, and assessment rubrics. Observation guides were used to record students' participation, engagement, and responses to learning activities, particularly in relation to the integration of local values such as *siri' na pacce*, *sipakatau*, and *getteng*. Semi-structured interviews were conducted with students and teachers to gather qualitative insights into the module content, clarity, and relevance. The assessment rubric provided a systematic evaluation of the module's feasibility, readability, and classroom applicability, ensuring that both theoretical and practical aspects were effectively aligned (Rahim, 2021; Hidayat & Mansur, 2024).

Data Analysis

The data were analyzed using various techniques, depending on the type of data collected. Interview transcripts, classroom observations, and documentation were analyzed using thematic analysis to identify emerging patterns, categories, and themes within the qualitative data (Braun & Clarke, 2021). Content analysis was also employed to evaluate the alignment of the module's content with learning objectives and the cultural context.

Meanwhile, data obtained from the questionnaires were analyzed using descriptive quantitative analysis. Each questionnaire item was scored using a four- or five-point Likert scale (e.g., strongly agree to disagree strongly). The scores were then calculated to obtain mean values, percentages, and response distributions. These scoring results were used to map students' perceptions of the material's clarity, their level of engagement, and the usability of the module. This analysis provided measurable insights into students'

responses during the trial phase.

Triangulation was conducted by integrating findings from interviews, observations, documentation, and questionnaire data to enhance the credibility and validity of the research outcomes (Creswell & Poth, 2018). Revisions to the module were made based on the overall analysis to improve its clarity, relevance, and overall effectiveness.

FINDINGS

A limited trial of the sociology learning module based on Bugis-Makassar local wisdom was conducted on 30 eleventh-grade students at Madrasah Aliyah Swasta DDI Baru-Baru Tanga, Pangkep. The study employed the Borg & Gall (1983) development model, including the stages of: (1) research and information collection, (2) planning the preliminary product, (3) developing the initial module, (4) expert validation, (5) product revision, and (6) limited trial testing. The trial aimed to assess the feasibility, clarity, cultural relevance, student engagement, and value internalization of the module.

Research and Information Collection

Based on the main findings of the study, it was revealed that teachers require more contextual teaching materials to enable students to connect sociological concepts with the realities of Bugis–Makassar culture encountered in their daily lives. Classroom observations indicated low levels of student learning motivation, mainly due to the abstract nature of the instructional materials, which were not sufficiently linked to students' social and cultural experiences. These findings are further supported by an analysis of curriculum documents, which clearly emphasize the need to integrate local wisdom into the learning process so that sociology instruction functions not only as theoretical knowledge but also as a meaningful medium for understanding and internalizing local cultural values.

Before presenting Table 1, it is important to clarify the sources of the data summarized in the table. The data were collected through multiple techniques to ensure comprehensive and credible findings. Specifically, the information was gathered from in-depth interviews with sociology teachers to explore instructional challenges, questionnaires and informal interviews with students to capture their learning experiences and perceptions, direct classroom observations to examine student participation during learning activities, and document analysis of curriculum guidelines to identify formal requirements related to the integration of local culture. These various data sources were then systematically analyzed and synthesized to identify key learning needs, which are presented in Table 1.
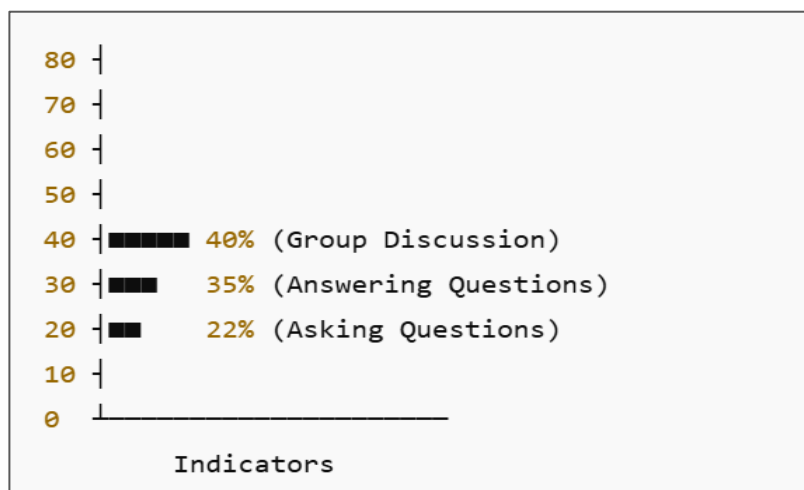
Table 1. Learning Needs Based on Data Sources

No	Source	Detailed Findings	Interview Excerpt
1	Teacher	Abstract materials with minimal local examples	"If local cultural examples are included, students understand much faster."
2	Students	22 students stated that the material was not interesting	"Sometimes I do not understand the examples in the book; they are too general."
3	Observation	60% of students were passive during discussions	Students raised no questions
4	Curriculum Documents	Require integration of local culture	Stated in Sociology Learning Outcomes (Phase F)

Based on Table 1, it can be interpreted that the primary learning need in sociology instruction lies in the limited connection between teaching materials and the students' local cultural context. Findings from both teachers and students reveal a shared perception that abstract materials with minimal local examples contribute to low levels of understanding and interest in learning. This condition is further supported by classroom observation data, which show a high level of student passivity during discussions, indicating limited cognitive and affective engagement in the learning process. Meanwhile, the analysis of curriculum

documents confirms that the integration of local culture is not merely a practical necessity in classroom practice but also a normative requirement mandated in the sociology learning outcomes. Therefore, the table highlights a gap between curriculum expectations and actual instructional practices, emphasizing the need to develop contextual, local wisdom–based teaching materials to enhance student motivation and conceptual understanding.

Before presenting the figure, it is necessary to explain the context in which the data were collected. The data illustrated in the figure were obtained through systematic classroom observations conducted prior to the development of the learning module. These observations focused on key indicators of student engagement, including participation in group discussions, responsiveness in answering teachers' questions, and students' initiative in asking questions during learning activities. Each indicator was quantified to provide a clear picture of students' initial engagement levels. The results of these observations are presented in the following figure, illustrating the baseline condition of student engagement before the implementation of the contextual learning module.

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80 ┤
70 ┤
60 ┤
50 ┤
40 ┤■■■■■ 40% (Group Discussion)
30 ┤■■■   35% (Answering Questions)
20 ┤■■    22% (Asking Questions)
10 ┤
 0 ┴────────────────────────

         Indicators
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Figure 1. Student Engagement Level Before Module Development

The figure illustrates students' engagement levels based on three participation indicators observed prior to the development of the learning module. The highest level of engagement is shown in group discussion activities, with 40%, indicating that students tend to participate more actively when working collaboratively with their peers. Student engagement in answering teachers' questions reaches 35%, suggesting that responses are still limited and not evenly distributed among students. The lowest level of engagement is observed in asking questions, with only 22% of students reflecting their low initiative and confidence in actively inquiring during the learning process. Overall, these findings suggest that student participation remains largely passive and reactive, rather than proactive, highlighting the need for more contextual and participatory instructional interventions to enhance active classroom engagement.

Planning the Preliminary Product

Before presenting Table 2, it is essential to clarify the basis for developing the proposed learning module. The module design was formulated by synthesizing findings from classroom observations, interviews with teachers and students, and analyses of local cultural and social data. These data sources were used to ensure that the module content, learning methods, and visual elements are contextually relevant, culturally grounded, and aligned with students' learning needs. Table 2 presents a detailed plan of the module structure, including the thematic focus of each chapter, instructional methods, and supporting illustrations.

Table 2. Detailed Module Plan

Module Section	Description	Data Source
Chapter 1	Social values with examples from Bugis–Makassar youth life	Observation & interviews
Chapter 2	Social norms and violations of local norms	Local social cases
Chapter 3	Siri', Pesse, Sipakatau, Sipakalebbi	Local cultural data
Method	CTL & PBL	Teacher recommendations
Illustrations	Traditional clothing, cultural activities, baruga	Student requests

Before presenting the interview findings, it is necessary to clarify that these data were collected to gain deeper insights into the needs and expectations of teachers and students regarding the development of a locally based sociology learning module. Semi-structured interviews were conducted with a sociology teacher and several students to explore their perspectives on the relevance of material, the use of contextual examples, and the inclusion of visual elements in learning materials. The following excerpts were selected because they represent dominant viewpoints and are directly related to the objectives of the module development. Additional interview excerpts are:

"It would be better if the module includes real cases from the students' own village." (Sociology Teacher)

"If the module contains Bugis cultural pictures, I think it will be easier to remember." (Student 11-Science)

Based on the interview excerpts, it can be concluded that both teachers and students strongly emphasize the need for learning modules that are more contextual and rooted in their local socio-cultural environment. The teacher highlights the importance of incorporating real cases from students' own villages to make sociological concepts more concrete and meaningful. Meanwhile, the student highlights the role of local cultural visuals, such as Bugis cultural images, in enhancing memory retention and interest in learning. These findings suggest that integrating local context through authentic case studies and culturally relevant illustrations can enhance conceptual understanding while also increasing student motivation and engagement in the learning process.

Developing the Initial Module

Before presenting Table 3, it is important to explain the progress of the module development process. The data in this table were obtained from the researcher's documentation and development records during the initial phase of designing the sociology learning module based on Bugis–Makassar local wisdom. The table provides an overview of the key module components and the extent to which each component has been completed prior to implementation and validation. Table 3 presents the initial module components along with their respective completion status.

Table 3. Initial Module Components and Completion Status

Component	Details	Completion (%)
Core Material	Values, norms, Bugis–Makassar culture	100%
Illustrations	15 images of Bugis–Makassar culture	80%
Exercises	10 exercises and 3 case studies	90%
Reflection Section	Questions about siri' and pesse	70%

Based on Table 3, it can be inferred that the development of the core learning materials has been fully completed, indicating that the main sociological content, which integrates values, norms, and Bugis–Makassar culture, is ready for use. The exercises component also shows a high level of completion, suggesting that students are provided with sufficient opportunities to apply concepts through practice questions and case studies. However, the illustrations and reflection sections are still in progress, with completion levels of 80% and 70%, respectively. This indicates that further refinement is needed, particularly in enriching visual representations of local culture and deepening reflective questions related to *siri'* and *pesse*. Overall, the table

demonstrates that while the module is essentially prepared, targeted improvements in visual and reflective components are necessary to enhance student engagement and critical reflection.

Before presenting the interview excerpt, it is important to clarify that this feedback was obtained during the module development stage as part of the expert validation process. The interview was conducted with a media expert to evaluate the readability, visual appeal, and overall presentation of the module. This stage aimed to identify aspects of the module that could be improved to enhance student engagement and ensure that the learning materials are pedagogically practical and visually attractive. Interview excerpt during module development:

"The text is good, but add dialogues between characters to make it more lively." (Media Expert)

Based on the interview excerpt, it can be concluded that although the textual content of the module is considered adequate, improvements are still needed in terms of presentation style. The suggestion to add dialogues between characters indicates a need for more interactive and narrative elements to make the module more engaging and lively for students. This feedback highlights the importance of combining well-structured content with creative presentation strategies, suggesting that the inclusion of dialogues can help humanize abstract sociological concepts, support comprehension, and increase students' interest in learning.

Expert Validation

Before presenting Table 4, it is necessary to explain that the evaluation data were obtained through an expert validation process conducted to assess the feasibility of the developed sociology learning module. Three experts with different areas of expertise were involved, namely a sociology content expert, a Bugis cultural expert, and a media expert. Each expert evaluated the module using predefined assessment aspects, including content accuracy, cultural relevance, language use, and layout design. The scores provided by the experts were then averaged to determine the overall feasibility level of the module. The results of this evaluation are presented in Table 4.

Table 4. Evaluation Scores from Three Experts

Aspect	Expert 1 (Sociology)	Expert 2 (Bugis Culture)	Expert 3 (Media)	Average (%)
Content Accuracy	92	88	90	90
Cultural Relevance	90	94	88	90.7
Language	84	82	89	85
Layout	87	85	92	88
Total Average				88.2% (Highly Feasible)

Based on Table 4, it can be interpreted that the developed module achieved a high level of feasibility across all evaluated aspects. Content accuracy and cultural relevance received the highest average scores, indicating that the module successfully integrates correct sociological concepts with authentic Bugis–Makassar cultural values. This finding suggests strong alignment between academic content and local wisdom. The language aspect received a slightly lower average score, suggesting that minor revisions may be necessary to enhance clarity and readability for students. Meanwhile, the layout aspect received a high score, particularly from the media expert, reflecting an effective and visually supportive design. Overall, the total average score of 88.2% categorizes the module as "highly feasible," indicating that it is suitable for implementation with only limited refinements, particularly in its linguistic presentation.

Before presenting the additional validation comments, it is important to note that this feedback was collected during the expert validation stage to refine and improve the quality of the developed module. Experts from different fields provided the comments to identify specific aspects that require enhancement, particularly in terms of content relevance and visual presentation. These qualitative inputs complement the quantitative evaluation scores and serve as a basis for revising the module before its implementation. Additional validation comments:

"The case studies are very relevant, but provide more examples from modern life." (Cultural Expert)

"The layout is good; increase the size of the illustrations." (Media Expert)

Based on the validation comments, it can be concluded that the module is generally well-designed but still requires targeted improvements to meet learners' needs better. The cultural expert's suggestion to include more examples from modern life highlights the importance of balancing traditional cultural values with contemporary social realities, thereby enabling students to relate sociological concepts to their daily experiences more easily. Meanwhile, the media expert's recommendation to increase the size of illustrations highlights the importance of visual clarity in enhancing comprehension and maintaining students' attention. Together, these comments suggest that refining the module by enriching it with up-to-date case studies and enhancing its visual elements will further strengthen its relevance, readability, and overall instructional effectiveness.

Product Revision

Before presenting Table 5, it is necessary to explain that the data in this table summarize the revisions made to the learning module based on expert feedback obtained during the validation process. The revisions were made to enhance the clarity, relevance, and overall quality of the module prior to its final implementation. Table 5 presents the types of feedback provided by experts, the specific revisions undertaken, and the supporting evidence for each revision.

Table 5. Summary of Module Revisions

Expert Feedback	Revision Made	Evidence
Language too lengthy	12 paragraphs simplified	Revised drafts (Chapters 1–3)
Irrelevant images	6 new cultural illustrations added	Validation image set
Evaluation questions are too general	Added four new local case studies	Revised exercise list
Layout improvements	Updated headings & margins	Final module file

Based on Table 5, it can be interpreted that the revision process was systematic and responsive to expert recommendations. Language revisions focused on improving readability by simplifying overly lengthy paragraphs, which is expected to enhance students' comprehension. The addition of new culturally relevant illustrations addressed concerns regarding image relevance and strengthened the visual representation of Bugis–Makassar culture. Furthermore, refining evaluation questions by incorporating local case studies increased the contextual depth of assessment tasks. Layout adjustments, including improvements to headings and margins, contributed to better visual organization and user comfort. Overall, the table demonstrates that expert feedback was effectively translated into concrete revisions, resulting in a more coherent, contextual, and learner-friendly module.

Limited Trial Testing

Before presenting Table 6, it is essential to explain that the data in this table were collected from classroom observations conducted before and after the implementation of the Bugis–Makassar culture–based sociology learning module. The observations focused on key indicators of student engagement to examine changes in learning activities resulting from the use of the module. The percentages represent the proportion of students who actively participated in each activity during the observed learning sessions.

Table 6. Comparison of Learning Activities Before and After Module Implementation

Indicator	Before (%)	After (%)	Change
Asking questions	22	60	+38%
Answering questions	35	78	+43%
Group discussion	40	83	+43%
Giving case examples	18	72	+54%

Based on Table 6, it can be interpreted that there was a substantial improvement in student engagement across all observed indicators after the implementation of the module. The most significant increase occurred in students' ability to provide case examples, suggesting that the contextual and culturally grounded content helped students better relate sociological concepts to real-life situations. Notable improvements were also observed in asking and answering questions as well as participation in group discussions, indicating a shift from passive to more active and interactive learning behaviors. Overall, these findings demonstrate that the implementation of the locally based module had a positive impact on students' learning activities, supporting its effectiveness in enhancing engagement and participatory learning.

Before presenting Graph 2, it is important to clarify that the student learning outcome data were obtained from evaluation tests administered before and after the implementation of the Bugis–Makassar culture–based sociology learning module. These tests were designed to quantitatively measure changes in students' learning achievement resulting from the use of the module. The comparison of students' average scores before and after the intervention is presented in Graph 2.

Figure 2. Improvement in Student Learning Outcomes

Based on Graph 2, there is a significant improvement in students' learning outcomes following the implementation of the module. The average student score increased from 68 in the pre-implementation stage to 84 after the module was applied. This improvement suggests that learning activities that integrate local cultural context and more contextualized instructional materials effectively support students' understanding of sociological concepts. The increase in learning outcomes also suggests that the module not only enhances student engagement but also positively impacts students' cognitive achievement. Therefore, Graph 2 provides strong evidence of the effectiveness of the locally based learning module in improving both the learning process and learning outcomes.

Before presenting the additional student interview excerpts and the teacher observation, it is essential to clarify that these qualitative data were collected following the implementation of the Bugis–Makassar culture–based sociology learning module. Student interviews and teacher observations were conducted to capture changes in students' perceptions, understanding, and learning behaviors that may not be fully reflected in quantitative data. The excerpts presented below were selected to represent students' learning experiences and the teacher's perspective on classroom dynamics following the use of the module. Additional student interview excerpts:

"Now I understand the real meaning of siri' — not just shame, but also responsibility." (Student 11-IPK)

"This module makes me more confident to speak because I understand the examples clearly." (Student 11-Social Studies)

"The class used to be rather quiet, but after using this module, discussions increased significantly." (Teacher expert)

Based on these excerpts, it can be concluded that the implementation of the module had a positive impact not only on students' cognitive understanding but also on their values and attitudes. Students' more profound understanding of Siri suggests a more substantive internalization of local cultural values, extending beyond superficial interpretations. Moreover, increased student confidence in speaking reflects the effectiveness of clear and contextual examples in reducing barriers to participation. This finding is reinforced by the teacher's observation of significantly increased classroom discussions. Overall, these qualitative data strengthen the quantitative findings, demonstrating that the local wisdom–based learning module effectively enhances conceptual understanding, student confidence, and social interaction in the learning process.

Meanwhile, the results of the limited trial were obtained by assessing the module's feasibility, clarity of content, cultural relevance, student engagement, and the internalization of cultural values during the learning process. The detailed findings are as follows:

Table 7. Summary Table of Limited Trial Results for the Local-Wisdom-Based Sociology Module

Assessed Aspect	Mean Score	Brief Interpretation
Clarity & Feasibility of the Module	4.3	The module is clear, though some students still require more detailed instructions.
Alignment with Prior Knowledge	4.1	Relevant to students' experiences, though several concepts are still perceived as abstract.
Cultural Relevance	4.5	Very strong; students feel the content is closely connected to their everyday lives.
Student Engagement	4.2	Interactive activities increase participation, although a few students remain passive.
Internalization of Cultural Values	4.0	Cultural values are understood, but internalization is not yet evenly achieved across students.

Based on the Table 7, it can be inferred that the local-wisdom-based sociology module generally received positive responses from students across all assessed aspects. Cultural relevance achieved the highest mean score, indicating that the integration of local values and contexts was highly effective and meaningful for students. Clarity, alignment with prior knowledge, and student engagement also obtained high scores, suggesting that the module is broadly accessible and engaging. However, minor improvements are needed to clarify instructions further and reduce abstract explanations. The internalization of cultural values, although still rated positively, received the lowest mean score, suggesting that deeper and more consistent reinforcement may be necessary to ensure that all students fully internalize the intended values. Overall, these findings indicate that the module is feasible and well-received in a limited trial setting, with specific areas identified for refinement prior to wider implementation.

Module Feasibility and Clarity

Before presenting the table, it is essential to explain that the data were obtained from a student response questionnaire administered during the limited trial of the local wisdom-based sociology module. This aspect focused on evaluating students' perceptions of the module's feasibility and clarity, including ease of use, clarity of instructions, and overall comprehensibility. Students rated the module using a five-point Likert scale, where higher scores indicate more positive perceptions.

Table 8. Students' Responses on Module Feasibility and Clarity

Score	Number of Students	Percentage (%)
5	12	40
4	15	50
3	3	10
2	0	0
1	0	0

Based on Table 8, the majority of students provided positive evaluations of the module's feasibility and clarity. A total of 90% of students rated the module with scores of 4 and 5, indicating that the module is generally straightforward, easy to understand, and feasible to use in the learning process. Only 10% of students were assigned a score of 3, suggesting that a small number of learners still experienced minor difficulties, possibly related to instructions or the explanation of certain concepts. Notably, no students rated the module poorly (scores 1 or 2), which indicates that there were no significant issues regarding usability or clarity. Overall, these findings suggest that the module is highly feasible and well-presented, with only minor revisions required to enhance student comprehension further.

Alignment with Students' Prior Knowledge

Before presenting the table, it is important to clarify that this aspect was evaluated to determine the extent to which the module content aligns with students' existing knowledge and lived experiences. The data were collected through a student questionnaire administered during the limited trial, using a five-point Likert scale, where higher scores indicate more substantial perceived alignment between the module content and students' prior knowledge.

Table 9. Students' Responses on Alignment with Prior Knowledge

Score	Number of Students	Percentage (%)
5	10	33.3
4	16	53.3
3	4	13.3
2	0	0
1	0	0

Based on Table 9, most students perceived the module as well aligned with their prior knowledge and everyday experiences. A total of 86.6% of students rated this aspect with scores of 4 and 5, indicating that the concepts and examples presented in the module were generally familiar and relatable. Meanwhile, 13.3% of students gave a score of 3, suggesting that some concepts were still perceived as partially abstract or less connected to their previous understanding. Importantly, no students assigned low ratings (scores 1 or 2), indicating the absence of a significant mismatch between the module content and students' prior knowledge. Overall, these results suggest that the module effectively builds on students' existing knowledge, while still requiring minor refinements to contextualize certain abstract concepts further.

Relevance to Local Culture

Before presenting the table, it is important to explain that this aspect was assessed to measure the extent to which the module content reflects and integrates local cultural values familiar to students. The data were collected through a student response questionnaire during the limited trial of the module, using a five-point Likert scale, where higher scores indicate stronger perceived cultural relevance.

Table 10. Students' Responses on Relevance to Local Culture

Score	Number of Students	Percentage (%)
5	18	60
4	10	33.3
3	2	6.7
2	0	0
1	0	0

Based on Table 10, the majority of students strongly agreed that the module is highly relevant to their local culture. A total of 93.3% of students rated this aspect with scores of 4 and 5, indicating that the integration of Bugis–Makassar cultural values, examples, and illustrations was meaningful and closely connected to their

daily lives. Only 6.7% of students assigned a score of 3, suggesting that a small number of students felt the cultural relevance could still be strengthened. Notably, no students gave low ratings (scores 1 or 2), demonstrating that the module was widely perceived as culturally appropriate. Overall, these findings confirm that the module successfully embeds local cultural elements, which likely contribute to increased engagement and deeper understanding of sociological concepts.

Student Engagement

Before presenting the table, it is important to explain that this aspect was assessed to examine the extent to which the module encouraged students' active participation during the learning process. Student engagement was evaluated through a questionnaire administered during the limited trial, focusing on students' interest, participation in discussions, and willingness to express ideas. Responses were measured using a five-point Likert scale, where higher scores indicate a stronger perceived level of engagement.

Table 11. Students' Responses on Student Engagement

Score	Number of Students	Percentage (%)
5	14	46.7
4	12	40
3	4	13.3
2	0	0
1	0	0

Based on Table 11, most students reported high levels of engagement when using the module. A total of 86.7% of students rated their engagement with scores of 4 and 5, indicating that the module effectively stimulated interest and encouraged active participation in learning activities. Meanwhile, 13.3% of students provided a moderate rating, suggesting that a small proportion of learners were not yet fully engaged, possibly due to individual learning preferences or adjustment to the new learning approach. Importantly, no students were assigned low scores (1 or 2), demonstrating that the module did not hinder engagement. Overall, these findings suggest that the module has a positive impact on student engagement; however, additional strategies may be necessary to involve all students fully.

Value Internalization

Before presenting the table, it is important to explain that this aspect was evaluated to assess the extent to which students internalized the cultural values embedded in the module, particularly local values such as siri' and pesse. The data were collected through a student questionnaire administered during the limited trial, using a five-point Likert scale, where higher scores indicate stronger perceived internalization of values.

Table 12. Students' Responses on Value Internalization

Score	Number of Students	Percentage (%)
5	11	36.7
4	14	46.7
3	5	16.6
2	0	0
1	0	0

Based on Table 12, most students perceived that the module supported the internalization of cultural values at a relatively high level. A total of 83.4% of students rated this aspect with scores of 4 and 5, indicating that the values presented in the module were generally understood and meaningfully received. However, 16.6% of students provided a moderate rating, suggesting that the internalization of values was not yet evenly achieved among all learners. This finding implies that while the module effectively introduces and explains

cultural values, additional reinforcement through reflective activities or real-life applications may be necessary to deepen and equalize value internalization across students.

Before–After Comparison

From the students' perspective, the learning situation prior to using the module was characterized by significant difficulties in understanding sociology. Most students (73%) reported that sociology lessons felt abstract and disconnected from their cultural experiences. Learning activities were primarily characterized by lecturing, resulting in low engagement and limited opportunities for interaction. As a consequence, students struggled to relate key sociological concepts, such as values, norms, social integration, and social conflict, to Bugis–Makassar cultural practices that were familiar to them. This condition made learning feel distant from their daily lives and reduced their motivation to participate actively.

After the implementation of the module, substantial changes were evident in students' learning experiences. A large majority of students (89%) stated that sociological concepts became clearer, more concrete, and easier to relate to real-life situations. The integration of cultural examples, such as *Siri' na Pacce, Sipakatau*, and *Getteng*, helped students connect abstract theories with familiar cultural values, thereby enhancing comprehension and relevance. Classroom observations also revealed a notable increase in student participation, with the number of active participants rising from four students before the module to seventeen students after its implementation. This shift indicates that the module successfully transformed students from passive recipients into more engaged and confident learners.

Similar changes were also observed from the teachers' perspective. Before using the module, teachers described the learning process as overly theoretical and lacking contextual relevance. Students were generally passive and experienced difficulties understanding abstract sociological concepts, which often required teachers to repeat explanations multiple times. This situation made the learning process less effective and limited meaningful interaction in the classroom.

Following the use of the module, teachers reported a clear improvement in classroom dynamics. Students became more active, frequently asking questions and participating in discussions. The use of cultural examples made sociological concepts easier to explain and understand, reducing the need for repeated explanations. Teachers emphasized that the module "made the classroom more alive" and significantly increased students' enthusiasm for learning sociology.

In evaluating the module, teachers viewed it positively and highlighted several strengths. They noted that the module's structure is more systematic than standard textbooks, making it easier to follow and implement in classroom instruction. The integration of local culture was seen as a key factor that made learning more meaningful and relevant for students. At the same time, teachers suggested further refinement by adding guided worksheets to support lower-performing students better, indicating a constructive direction for future module improvement.

Table 13. Before–After Comparison Based on Classroom Observation

Aspect	Before Module	After Module
Student activity	passive	actively engaged
Material relevance	low	very high
Teacher–student interaction	one-way	two-way
Class enthusiasm	low	high
Cultural value application	minimal	observable

Based on the table, classroom observations reveal a clear transformation in the learning process following the implementation of the module. Prior to the module, student activity was largely passive, with limited interaction and low enthusiasm, while learning materials were perceived as having low relevance to students' lives. Teacher–student interaction tended to be one-way, dominated by teacher explanations, and the application of cultural values in learning was minimal. After using the module, students became actively

engaged in learning activities, demonstrating higher participation and enthusiasm. Learning materials were perceived as highly relevant due to the integration of local cultural contexts, which also encouraged two-way interaction between teachers and students. Furthermore, the application of cultural values became observable in classroom discussions and examples. Overall, these findings indicate that the module significantly improved classroom dynamics by fostering active engagement, meaningful interaction, and contextual learning grounded in local wisdom.

DISCUSSION

The limited trial of the Bugis–Makassar local wisdom-based sociology module demonstrated clear improvements in students' conceptual understanding, learning relevance, engagement, and internalization of cultural values. These findings directly address the main Research Questions, particularly (RQ1) how the developed module supports students' comprehension of sociological concepts, and (RQ2) how culturally embedded materials influence students' engagement and internalization of values. Overall, the results indicate that a contextual and culturally grounded approach can effectively address instructional challenges by making sociological concepts more relatable and meaningful to learners. Recent empirical studies consistently show that culturally responsive learning enhances both cognitive understanding and affective engagement (Mulyadi & Rahman, 2023; Hasanah et al., 2024; Putri & Anwar, 2022). Thus, the developed module aligns with current evidence while extending its application specifically to the Bugis–Makassar cultural context. This section interprets the empirical findings, discusses their instructional implications, and highlights the study's contribution to the broader literature.

The first aspect, module clarity and feasibility, which achieved a mean score of 4.3, indicates that the module is generally easy for students to follow due to explicit language, structured activities, and coherent sequencing. In relation to RQ1, this finding suggests that clarity of instructional design plays a crucial role in supporting students' conceptual understanding. Nevertheless, a small group of students expressed the need for more detailed instructions, particularly for learning tasks involving multi-step analysis. This variation suggests that, although the module is accessible to most learners, students with lower academic literacy still require additional instructional support. Recent studies on instructional scaffolding confirm that structured guidance and explicit learning cues are essential for ensuring equitable comprehension in diverse classrooms (Sari & Kurniawan, 2021; Yuliana et al., 2023). Therefore, strengthening the module through enhanced visual cues, worked examples, and step-by-step task guidance would further improve its clarity and inclusiveness.

The alignment with students' prior knowledge, which yielded a mean score of 4.1, demonstrates that the module effectively connects sociological concepts with students' everyday social experiences, thereby supporting RQ1. However, some students still found certain abstract concepts—such as social integration and social values—to be challenging. This indicates that activating prior knowledge alone is not always sufficient without deeper contextual reinforcement. Contemporary research emphasizes that meaningful learning occurs when abstract concepts are consistently linked to familiar social realities through concrete examples and reflective discussion (Aminah et al., 2023; Fauzi & Rahman, 2021). Accordingly, enriching the module with additional real-life cases and analogies drawn from Bugis–Makassar society would further strengthen students' meaning-making processes.

Cultural relevance emerged as the highest-rated aspect, with a mean score of 4.5, directly addressing Research Question 2. Students strongly related to cultural values such as *siri' na pacce*, *sipakatau*, and *getteng*, and reported that these values made sociological concepts more meaningful and personally relevant. Recent studies have affirmed that local wisdom-based learning materials not only enhance comprehension but also strengthen students' cultural identity and sense of belonging (Lestari & Mahmud, 2024; Nursalam et al., 2022). These findings demonstrate that culturally grounded modules function not merely as academic tools but also as instruments for cultural preservation and value transmission, which is particularly important in multicultural educational contexts.

Student engagement, reflected in a mean score of 4.2, further supports RQ2 by demonstrating that culturally responsive and interactive activities positively influence participation. Learning activities, such as group discussions, role-plays, and contextual case analyses, successfully encouraged active involvement, although engagement levels varied among students. Some learners remained relatively passive due to a lack of confidence or a preference for observational learning. Recent research on participatory learning suggests that both individual characteristics and instructional design shape student engagement, and that differentiated participation strategies are necessary to accommodate diverse learner profiles (Suryani & Daud, 2022; Rahmawati et al., 2023). Therefore, incorporating structured group roles, guided discussion prompts, and scaffolds for supportive participation can help ensure more equitable engagement.

Finally, the internalization of cultural values, with a mean score of 4.0, provides further empirical support for RQ2. The findings indicate that students generally understood the cultural values embedded in the module, and some were able to apply them in their daily behavior. However, the depth of internalization varied, with several students remaining at a conceptual level. Recent studies on value-based education emphasize that internalization is a gradual process that requires repeated exposure, reflection, and real-life application (Rahim, 2021; Hidayat & Mansur, 2024). In line with the principles of the Merdeka Curriculum (Kemdikbudristek, 2022), the module could be strengthened by integrating reflective journals, community-based projects, and social observation tasks to deepen and sustain the internalization of values across learners.

This study makes several important contributions to the field of culturally responsive sociology education. First, it extends existing research on local-wisdom-based learning, which has primarily focused on language education, character education, or the natural sciences, by applying indigenous cultural values—particularly those of the Bugis–Makassar community—within sociology instruction, an area that has received limited scholarly attention. Second, beyond emphasizing cultural relevance, this study provides empirical evidence demonstrating that the integration of cultural values into learning materials significantly enhances students' conceptual understanding of sociological concepts, thereby strengthening the link between cultural context and cognitive learning outcomes in the social sciences. Furthermore, the developed module offers a practical and replicable framework for integrating cultural identity into modern sociology curricula, illustrating how indigenous values can be systematically aligned with national curriculum standards in multicultural educational settings across Indonesia. Finally, by examining the process through which values such as *siri' na pacce* are understood and gradually internalized by students, this research enriches the literature on character education within cultural communities, reinforcing the view that value internalization is a reflective and developmental process rather than an immediate instructional outcome. Collectively, these contributions not only confirm existing theories of culturally responsive pedagogy but also extend their theoretical and empirical application within the context of sociology education.

CONCLUSION

Based on the development process and the limited trial of the Bugis–Makassar local-wisdom-based Sociology Learning Module conducted with eleventh-grade students at MAS DDI Baru-Baru Tanga, it can be concluded that the module demonstrates strong feasibility, cultural relevance, and instructional effectiveness. Expert validation results place the module in the "highly feasible" category, as indicated by a material validation score of 92%, media or design validation score of 88%, and language validation score of 90%. These values confirm that the module meets high standards in terms of content accuracy, structural organization, linguistic clarity, and design quality.

During the limited trial, students responded positively to the module. Material clarity received a score of 89%, cultural relevance reached 93%, student engagement achieved 87%, and internalization of cultural value reached 91%. These results indicate that the module successfully supports students in understanding sociological concepts by connecting them to familiar cultural practices, making the learning process more contextual, meaningful, and aligned with their daily social reality.

In terms of academic achievement, the module also showed a significant impact. The students' average pre-test score was 68, increasing to 84 on the post-test, representing a 16-point gain. This improvement demonstrates the effectiveness of the module in enhancing conceptual understanding. Furthermore, the incorporation of Bugis–Makassar cultural values—such as *siri'*, *pesse*, *lempu'*, and *getteng*, along with the principles of *sipakatau*, *sipakainge'*, and *sipakalebbi*—ensured that learning addressed not only cognitive development but also students' social and moral character formation.

Overall, this module demonstrates high feasibility, strong cultural relevance, a practical learning impact, and the ability to promote the internalization of local cultural values. Therefore, it is recommended for broader use as an innovative and culturally grounded learning resource in sociology instruction at the senior high school level.

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