# Guided Inquiry Learning-Based Literary Learning Evaluation Model as an Instrument for Strengthening Character Values and Student Self-Reflection

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#### **ABSTRACT**

Evaluation of literature learning tends to focus only on cognitive aspects and pays less attention to the potential of literature as a medium for strengthening character and student self-reflection. This study aims to analyze the evaluation model of literature learning based on Guided Inquiry Learning as an instrument for strengthening character values and student self-reflection. This research used a qualitative approach with descriptive methods. The data were collected using the literature study method through reviewing academic sources and analyzed using the theory of Miles, Huberman, and Saldana. The results showed that the Guided Inquiry Learning evaluation model has six main stages, namely orientation, formulating problems, formulating hypotheses, collecting information, testing hypotheses, and concluding. Each learning syntax allows students to construct personal meaning, evaluate the value in the text, and reflect on personal experiences. Evaluation is not only a tool to measure text comprehension, but also a means to build character, increase self-awareness, and strengthen critical thinking skills. The integration of character values in the evaluation process makes this model very relevant in 21st century education.

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## 1. INTRODUCTION

Literature education not only serves as a medium for developing students' cognitive abilities in understanding the structure and meaning of literary texts, but also plays an important role in shaping students' personalities, characters, and fostering self-awareness (Purwanto & Tjahjono, 2021). Literary works, as representations of human life, can serve as spaces for reflection on life experiences, thereby enhancing students' affective development (Alfarisy & Iswandi, 2025; Fitzgelard et al., 2023;

Kartikasari, 2016). Literature learning in the classroom should not only be directed at understanding the content of the text, but also at exploring the character values contained within it so that students are able to reflect on them in their personal experiences (Risman & Santoso, 2017). Students can learn to understand others' perspectives, feel the inner conflicts of characters, and reflect on values relevant to their lives. Therefore, effective literature learning and evaluation should not only focus on intellectual achievements but also on strengthening character dimensions and self-reflection that encourage students to become better individuals.

In this era, students are faced with various global challenges due to rapid technological developments, such as moral crises and the degradation of social values, making literary education an urgent tool for relevant character education (Aurumajeda et al., 2025; Suradi, 2018). 21st-century education emphasizes the mastery of critical thinking, collaboration, creativity, communication, and character building as the main foundations of the learning process (Andersen & Rustad, 2022; Muliastrini, 2020; Peña-Ayala, 2021; Voogt & Roblin, 2012). Literature learning has the potential to enhance students' affective and reflective dimensions through literary texts rich in meaning and values. However, the reality on the ground shows that learning evaluation is limited to memorization, not to understanding the values contained in literary texts. Ideal literary learning evaluation should not only assess understanding of the text's content but also enable students to reflect on the values contained in the text and apply them to real life (Lidya, Tulak, & Putri, 2025). This aligns with the demands of the *Kurikulum Merdeka*, which emphasizes the importance of meaningful learning, character-oriented education, and competency-based learning.

The implementation of literature learning in the classroom is often positioned as a subject that emphasizes theoretical aspects. Teachers tend to focus more on understanding intrinsic elements, text structure, language style, or analytical literary theory (Wardani, Nurhayati, & Safitri, 2016). The affective domain, which is a key component of literature education, does not receive sufficient attention. Additionally, evaluations of literature education tend to be cognitive in nature and focus more on mastery of literary theory rather than on fostering the affective values that can be cultivated through literary texts. Students are more often tested with objective questions or essays that require factual answers, such as plot, characters, setting, and linguistic elements, rather than on their ability to understand, feel, and reflect on the values contained in literary texts (Pratiwi et al., 2021). The interpretation of literary works as a medium for character development and self-reflection among students is not utilized optimally. Students tend to memorize the material and content of the story without understanding the message or lessons that can be drawn from the literary work. A balance between cognitive and affective aspects in literary education is important so that students not only understand the text but also can reflect on its values in real life (Kuhlthau et al., 2015).

The phenomenon of evaluation in literature learning in schools shows a gap between the potential of literature in character education and the reality in the field, which is still instructional in nature. Evaluation, which should ideally be a means of self-reflection and character value reinforcement, has instead become a technical measuring tool that can limit students' room for appreciation. The evaluation model widely used by teachers in the classroom in literature learning tends to be normative and oriented towards final results, rather than the process. However, evaluation should be an integral part of the learning process that can assess students' character growth and self-reflection holistically (Hakim, 2024; Zuhriyah et al., 2025). Therefore, a learning approach and evaluation model that can bridge cognitive and affective understanding of literature are needed. One relevant approach to address this challenge is Guided Inquiry Learning (GIL) (Lee, 2021). This approach places students at the center of active learning, where they explore information, ask questions, and build understanding through a structured guidance process (Dewi, 2016; Muzaki et al., 2024; Soltis et al., 2015). GIL enables students not only to understand the content of the story but also to explore the values and experiences

of the characters in the literary work. This process opens up space for students to reflect on personal experiences, build empathy, and develop self-awareness. If this approach is integrated into the learning evaluation process, evaluation is no longer merely assessing factual understanding but also serves as a tool to assess students' thinking processes, attitudes, and affective growth.

The Guided Inquiry Learning (GIL) approach is relevant when applied in the evaluation of literary learning because it provides space for students to actively explore texts, delve into deeper meanings, and reflect on the values of life contained within them. This approach enables students to explore literary works in depth, from asking questions, analyzing issues, to reflecting on the meanings obtained (Rodriguez, Hunter, Scharlott, & Becker, 2020). GIL consists of six main syntaxes, namely orientation, formulating problems, formulating hypotheses, proving, testing hypotheses, and formulating conclusions (Damayanti et al., 2022). Each stage provides space for students to not only understand the structure and content of the work but also explore character conflicts, hidden life values, and connect experiences in the text with their personal lives. Through this approach, literary learning evaluation can be directed toward a more authentic and meaningful process as students are trained to construct arguments, evaluate values in the text, and build reflective conclusions. GIL can serve as a bridge to uncover character values in literature and systematically strengthen students' affective aspects in the evaluation process.

There are challenges in systematically integrating students' character values into the literary learning evaluation process. Field practices show that learning approaches are still dominated by conventional methods that do not stimulate critical thinking and self-awareness in students (Harahap et al., 2025). The GIL model has proven effective in promoting active engagement and personal meaning-making with the material, but the evaluations conducted still focus on cognitive aspects without considering character indicators and self-reflection in a holistic manner (Agustini et al., 2024; Linggasari & Rochaendi, 2022). This highlights the need for a literary learning evaluation model that not only measures academic achievement but also serves as a tool for character development and self-reflection for students. Previous research has focused more on the effectiveness of learning models but has not explicitly developed an evaluation system based on GIL that is integrated with character values. However, the right evaluation approach can serve as a catalyst in shaping students' identities through reflective experiences (Sundana, Sastromiharjo, & Sumiyadi, 2018).

The evaluation of literature learning based on GIL becomes more meaningful and holistic because it integrates cognitive and affective aspects. Students are not only assessed based on their ability to understand texts, but also on their ability to connect the values in the texts with their personal experiences and reflect on them. Previous studies have demonstrated the effectiveness of the inquiry approach in enhancing student engagement and understanding, as well as strengthening empathy, emotional involvement, and social awareness among students (Ritiauw et al., 2021). However, research specifically addressing the GIL-based literary learning evaluation model, particularly for strengthening students' character and self-reflection, remains limited. Therefore, the purpose of this study is to conceptually and theoretically examine how a GIL-based literary learning evaluation model can be designed and implemented as an instrument for strengthening students' character values and self-reflection. This study not only contributes to the development of more meaningful evaluation instruments but also to an understanding of how literature can be utilized as a means of fostering reflective and character-driven personal development.

### 2. METHODS

This study uses a descriptive approach with qualitative methods, which aims to describe and analyze in depth the Guided Inquiry Learning-based literary learning evaluation model as an instrument for strengthening students' character values and self-reflection. This approach was chosen

because it is suitable for examining educational phenomena in a contextual, complex, and meaningful way through the exploration of textual and theoretical data. The qualitative approach is designed to explore meaning through inductive data analysis (Creswell & Creswell, 2018). This design allows researchers to examine and formulate an evaluation model framework in depth based on academic literature and relevant conceptual findings. Data was collected using the library research method, which involves searching for and examining written sources relevant to the research focus. Researchers used various academic databases to search for and select scientific articles according to their needs. Researchers used various academic databases to search for and select scientific articles according to their needs. The criteria for inclusion of literature were scientific journal articles published in the last 10 years that were thematically relevant to literary learning, learning evaluation, Guided Inquiry Learning, character education, and student self-reflection.

Data analysis techniques use the Miles, Huberman, and Saldana (2014) model, which includes three stages: data reduction, data presentation, and conclusion drawing or verification (Miles, Huberman, & Saldana, 2014). In the data reduction stage, researchers filter and summarize information from various literature sources to focus on categories that are relevant to the research focus. In the data presentation stage, the results of the literature review are organized into matrices, tables, and conceptual narratives to facilitate the drawing of conclusions. The final stage involves drawing conclusions based on patterns, relationships between concepts, and the integration of theories consistent with the research objectives. This process is carried out interactively and continuously to maintain the validity of the analysis results. The validity of sources is maintained by applying source triangulation, comparing literature sources from different authors and the clarity of publication identities. Critical analysis of library data is carried out by assessing theoretical arguments, methodological strengths, contextual relevance, and the novelty of ideas in each article. The researcher also elaborates on the weaknesses of each reference to strengthen the position and contribution of the evaluation model design that can be developed.

## 3. FINDINGS AND DISCUSSION

The Guided Inquiry Learning (GIL) approach allows students to become active subjects in understanding and analyzing literary works. The use of the GIL model enables students to not only read literary texts, but also explore critical questions, formulate hypotheses, and build reflective conclusions based on the experiences of characters and values in literary texts.

#### 3.1. The Urgency of Evaluation in 21st Century Literature Education

The 21st century marks a shift in the orientation of global education, from a content-based approach to character-based, competency-based, and reflective (Dass, 2014; Varas, Santana, Nussbaum, Claro, & Imbarack, 2023). Evaluation in literary education should not only serve as a tool for measuring cognitive domains but should also be positioned as a reflective and formative strategy capable of capturing transformations in students' values, emotions, and self-awareness. The evaluation system in contemporary education should be able to respond to the needs of glocal learners, i.e., students who can reflect on values in a global context through a critical and reflective approach to literary texts (Tarozzi, 2022). Essentially, literary works not only contain aesthetic messages but also complex moral and social value structures. Literary evaluation requires a holistic and in-depth approach. Evaluation in literary learning should be directed toward activities that encourage students to interpret the inner conflicts of characters, build empathy, and reflect on life values. Performative and affective-based evaluation in literary education can enhance students' emotional engagement and social value awareness, especially when integrated with inquiry-based and reflective learning approaches (Monib,

Qazi, & Apong, 2024). Most evaluation systems in literary education still tend to use summative and cognitive assessment methods, such as multiple-choice questions or factual essays. This model overlooks the core essence of literature as a space for contemplation and the formation of personal meaning for students. Traditional approaches in educational evaluation tend to be repetitive, unresponsive to students' affective development, and irrelevant to character development (Meylani, 2023). A more dynamic and participatory evaluation approach is needed to create meaningful literature education.

Evaluation in literature learning should not be interpreted solely as the end of the learning process, but should also be an integral part of the learning process. Formative feedback-based evaluation, reflective journaling, empathy rubrics, and process assessment have proven effective in measuring students' character development and self-awareness. To achieve ideal evaluation, it is necessary to implement an adaptive evaluation system that not only measures academic achievement but also assesses students' social-emotional competencies, thereby enabling literature to serve as a medium for comprehensive assessment (Wibawa & Wirasti, 2025). 21st-century competencies, such as critical thinking, empathetic communication, value reflection, and collaboration, must be part of the evaluation indicators for literature. The curriculum and evaluation must align to produce graduates who are character-driven, reflective, and possess high critical thinking skills (Gaol, 2023).

21st-century educational competencies refer to a set of skills that students need to face the challenges of globalization, digitalization, and socio-cultural transformation (Le, Hlaing, & Ya, 2022; Nainggolan, 2022). These competencies include critical thinking, problem-solving, communication, collaboration, creativity, innovation, digital literacy, information literacy, media literacy, character development, and social responsibility (Syarifuddin et al., 2023; Todorova, 2024). In literature education, these competencies cannot be developed optimally if evaluation remains focused on memorization outcomes. Therefore, literary evaluation should undergo reconceptualization so that it not only assesses understanding of the text's content but also how students connect the text to life values, express it through a reflective perspective, and collaborate in interpreting its meaning.

In 21st-century education, effective literary evaluation must reflect the integration of cognitive and affective domains. The cognitive domain refers to students' ability to understand, analyze, and interpret the elements of literary works, both in terms of structure and meaning. This includes the ability to think critically about the plot, conflict, and values contained in the text. Evaluation at this level takes the form of text analysis, interpretive argumentation, and logical reflection. However, literary evaluation cannot stop at the cognitive level alone. The second domain, the affective domain, refers to students' ability to internalize the values in literary texts into real life. Literary works, as windows into human experience, contain the emotional complexity, morality, and inner conflicts of characters. Therefore, literary evaluation should be directed toward assessing students' achievements in developing empathy toward characters, comprehending moral dilemmas, and reflecting on values such as honesty, social responsibility, and tolerance. Assessment in this dimension can be realized through reflective journals or narrative essays.

Collaborative dimensions are an important aspect of literary learning in this century. Literary assessment must accommodate how students work in teams to discuss the meaning of texts and develop a collective understanding. Appropriate forms of assessment include peer evaluation or creative projects based on text interpretation. Literary assessment not only measures what students know, but also how they feel, evaluate, and interact socially through the reading experience. Evaluation in 21st-century competency-based literary education can serve as a primary tool in implementing the *Kurikulum Merdeka* if it is designed with assessment instruments that consider aspects of value, reflection, and students' emotional engagement with the text. The following is an example of implementing 21st-century competency-based evaluation in literary education.

21st Century Competencies	Form of Evaluation	Description
Critical Thinking	Character and conflict analysis	Students assess the moral choices of the characters
Creativity	Rewrite the story with new values	Narrative innovation that inserts the value of empathy or courage
Collaboration	Group discussion and presentation	Discussion of the meaning of values and the relevance of the story to social reality
Self-reflection	Narrative journal	Students write personal experiences similar to literary characters
Character	Affective assessment rubric	Assessment of students' ability to internalize the value of the text

Table 1. Evaluation of 21st Century Competencies in Literature Learning

### 3.2. Concepts and Principles of Guided Inquiry learning in Literature Learning

GIL can develop students' critical, reflective, and collaborative thinking skills. Inquiry-based learning can enhance students' capacity for self-reflection and value transfer into real-life contexts through interaction with high-affective value texts (Zheng, Shi, Fu, & Liu, 2025). Literature learning has pedagogical potential because literature originates from complex human experiences, namely emotions, values, morality, and inner conflicts. Therefore, effective literature learning should adopt a holistic and humanistic pedagogical approach. GIL is rooted in Vygotsky's social constructivism paradigm (1978), meaning is formed through social interaction, exploration, and individual reflection in a supportive environment (Vygotsky, 1978). GIL provides space for students to navigate the experience of reading literature in a personalized, critical, and reflective manner. Students are invited to not only understand the story, but also experience the values in the text through self-questioning, indepth exploration, and collective discussion for character strengthening through inner and social dialog.

GIL is a learning approach that places students as the main actors in the process of seeking knowledge with direction and facilitation from the teacher. Meaningful learning occurs when learners actively construct understanding through social interaction and exploration (Vygotsky, 1978). In literature learning, Guided Inquiry Learning allows students to explore the meanings, values and moral messages in literary works in depth through a cycle of critical investigation. GIL in literature involves critical reading, constructing meaningful questions, and reflecting on personal experiences of literary texts through evidence-based thinking stages (Hansen et al., 2019).

The model has a number of key principles that make it effective in encouraging students' cognitive and affective engagement in a balanced manner. First, it is the principle of engagement that directs students to not just receive meaning from literary texts, but to explore, ask critical questions, and construct their own interpretations of the values and moral messages contained in literary texts. This process will encourage students to become more reflective and deep-thinking learners in line with the 21st century learner profile (Kuhlthau et al., 2015). Second, evaluation is seen as a continuous process, not just a final measurement tool. Assessment is not only done at the end, but also continuously throughout the inquiry process, from initial exploration to final reflection (Pratiwi et al., 2021). In GIL, evaluation takes place throughout the learning process through activities such as reflection journals, guided discussions, and exploration of meaning that measure understanding progressively.

The third principle is evidence-based and reflection, each student's interpretation of literary values or messages must be supported with logical quotations or arguments from the text. This fosters habits of critical and argumentative thinking that are unique to literary evaluation. Fourth, GIL encourages collaboration in learning, evaluation can involve group work, peer assessment, and dialogical discussions that assess students' ability to construct meaning together and appreciate other

perspectives. Finally, an important principle of GIL in literary evaluation is the integration of affection and values, where the evaluation not only measures students' cognitive understanding of the text structure, but also their ability to internalize character values such as empathy, responsibility, and self-awareness through the reading experience (Wardani et al., 2016). With these principles, GIL makes literature evaluation a process that not only measures "what is known", but also "how students change ethically and emotionally" after reading literature.

The GIL approach in literature learning evaluation has a systematic structure consisting of six main stages. Each stage supports students' critical, reflective and affective thinking processes. When applied in a literary context, this structure not only assesses comprehension of text content, but also how students construct personal meaning, character values, and self-awareness through interaction with literary works. The six main stages in this model are orientation, formulating problems, formulating hypotheses, gathering information, testing hypotheses, and concluding. The structure or stages in GIL are effective in evaluating literature and students' reflective attitudes because they do not simply measure memorization, but encourage effective value making (Pratiwi et al., 2021).

The orientation stage serves as an introduction that stimulates students' interest in the literary text to be studied. The teacher provides the social, cultural, and moral context of the text, as well as prompts initial questions that open up space for exploration. A structured orientation increases students' cognitive and emotional readiness in linking the value of the text with real experiences (Mazidah et al., 2023). At the problem formulation stage, students are trained to formulate investigative questions about moral issues, values, or character conflicts in literary works. The questions that arise can be an early indicator of students' critical thinking evaluation. This stage shows their ability to identify the complexity of the meaning of the text independently. This stage develops higher-order thinking skills and is the basis for assessing cognitive processes (Pratiwi et al., 2021). At the stage of formulating hypotheses, students make predictions or initial guesses about the values or moral messages contained in literary texts. This hypothesis can be an early indicator in assessing analysis and interpretation skills. The assessment in this stage includes the clarity of the argument and its relation to the literary context. Students who can construct value hypotheses well tend to have strong interpretative and ethical skills (Hansen et al., 2019).

In the information gathering stage, students begin to read and explore the text in depth, exploring quotations, symbolism, language styles, and contextual meanings. Students can discuss, find supporting literature, and relate to the reality of life. Evaluation in this stage includes the rigor of analysis, accuracy of evidence, and relevance to the initial hypothesis. This exploration phase of literary literacy is essential for developing critical understanding and multiple perspectives (Weirich et al., 2019). Students compare the results of their exploration with the initial hypothesis, revise their views and draw preliminary conclusions. Possible forms of evaluation are group discussions, value debates, or critical essays. Assessment focuses on consistency of argument, strength of evidence, and sensitivity to alternative perspectives. The hypothesis testing stage is an important phase in assessing students' metacognitive reflection skills (Kuhlthau et al., 2015; Wardani et al., 2016). This final stage invites students to draw personal conclusions about the text and reflect on its impact on their own values. Reflections can be in the form of journals, responsive poems, literary vlogs, or digital portfolios. Evaluation is directed at attitude transformation, self-awareness, and integration of character values. Reflective assessment has an important role in measuring the internalization of values and ethics through literature (Wardani et al., 2016). The following is a table of the stages in GIL and their relevance in literature learning evaluation.

Stages of Inquiry **Relevance in Literary Evaluation** Orientation Students are invited to examine the value setting of the story and the position of the reader Formulate problems Formulate critical questions about characters, conflicts, or themes Formulate hypotheses Predict values or messages that may be implied in the story Gather information Analyze text, quotations, and symbolism contextually Test hypotheses Group discussion or text-based argumentative essay writing Summarize and reflect State the value transformation experienced after reading

Table 2. Stages of Inquiry and their Relevance in Evaluation

# 3.3. Guided Inquiry Learning Based Literature Learning Evaluation Model

The GIL-based literature learning evaluation model is designed as a form of transformation from conventional evaluation approaches that tend to focus on cognitive aspects and memorization to evaluations that are oriented towards critical thinking processes, self-reflection, and character formation. This model integrates three pillars of modern evaluation, namely formative assessment, affective-reflective assessment, and process-based assessment, each of which synergizes with the principle of inquiry as the main basis of the GIL approach. This approach places students at the center of learning who actively construct meaning from texts through questioning, literacy exploration and reflection. In literature learning, evaluation not only measures students' understanding of intrinsic elements, but also assesses students' ability to interpret meaning that can be applied in everyday life (Kuhlthau et al., 2015).

The evaluation model based on GIL in literature learning is designed to bridge two main needs in 21st century literature education, namely strengthening cognitive abilities in analyzing and interpreting literary texts critically and as character building through self-reflection by internalizing values in life from literary texts. The model is dynamic, collaborative and transformative as it combines scientific thinking and inquiry with personal interpretation of aesthetic and ethical values in literary works. The model consists of six syntaxes, namely orientation, problem formulation, hypothesis formulation, information gathering, hypothesis testing, and reflection/conclusion (Kuhlthau et al., 2015).

The GIL based evaluation model in literature learning is designed to answer the challenges of 21st century learning that demands integration between critical thinking skills, literary literacy, and strengthening student character. This model shifts the role of evaluation from merely measuring learning outcomes to evaluating reflective and participatory processes. This approach is in line with the characteristics of literary texts that are rich in affective, cultural and social values. This model not only evaluates the understanding of the text structure (plot, characters, setting), but also evaluates how students construct meaning, interpret life values, convey reflections, and empathize with experiences in the text. It is an evaluative approach that relies on an inquiry-based scientific thinking process, where students engage in stages of in-depth exploration of the meaning of literary texts. The GIL based evaluation model in literature learning consists of six main stages adapted from the scientific inquiry structure and modified for the needs of literature education. Each stage not only directs the learning process, but also provides different evaluation points with corresponding instruments. The following table shows the implementation steps of the GIL evaluation model in literature learning.

Stages of Inquiry	Evaluation Activities	Indicators
Orientation	Discussion of initial meaning	Engagement, curiosity
Formulating a problem	Investigative literary questions	Critical, logical, value-oriented
Formulating a hypothesis	Prediction of literary message/value	Argumentative, contextual
Gathering information	In-depth text analysis	Relevant evidence, reasoning
Testing hypotheses	Discussion/essay/presentation	Revision of ideas, logic,
		empathy
Concluding and	Journal/responsive poetry	Transformation of attitudes
reflecting		and meaning

Table 3. Literature Evaluation Activities and Indicators

Based on the table above, in the first evaluation activity, the teacher can introduce the literary text, cultural background and value issues inherent in the story. The initial discussion encourages students' curiosity and emotional engagement with the context of the story. It is important to look at student engagement, initial discussion participation, and initial sensitivity to values. Effective orientation stages can increase students' affective engagement and their readiness to construct meaning (Mazidah et al., 2023). When formulating problems, students are asked to formulate investigative questions related to characters, moral conflicts, or value dilemmas in the story. This question shows the direction of thinking and the focus of the values that students will explore. Research indicators can be seen from the originality of the question, the depth of text problematization, and relevance to the social context. This stage is an important starting point for assessing critical thinking skills and value awareness in literature learning (Pratiwi et al., 2021). Next, students make conjectures or predictions about the meaning, value, or moral message that will be revealed in the text based on their previous questions. The ability to relate context to story content, clarity of value assumptions, and initial argumentative basis can be used as assessment indicators. The formulation of literary hypotheses encourages students to develop value narratives and ethical responses to texts in a personalized and reflective manner (Hansen et al., 2019).

Students analyze literary texts to gather quotes, symbols, conflict lines, and elements that support or oppose their hypothesis. This can be done through group discussion, reading notes, or mindmapping. Accuracy of evidence, ability to interpret symbolism, and criticality of the text can be assessment indicators. At the hypothesis-testing stage, students can write essays, present arguments in class discussions, or organize presentations that compare initial hypotheses with the results of text exploration. At this stage, students revise, defend or adjust their understanding. Text-based hypothesis testing in learning can improve higher-order thinking skills (Payu et al., 2022). In the last stage, students write personal reflections in the form of journals, poems, or narratives about the values they learned and how they relate to real life.

Based on the concept and principles of GIL, the following is the structure of the main stages in the GIL based evaluation model specifically designed for literature learning. Each stage reflects learning activities that can be assessed formatively and summatively using authentic evaluation instruments oriented towards students' cognitive, affective and reflective engagement.

Inquiry Stages	Objectives	Evaluation Instruments
Orientation	Foster early engagement and	Observation sheet, motivation
	awareness of literary context	journal
Formulating	Explore moral issues or conflicts in	Exploratory questionnaire, open-
problems	the text	ended questions
Formulating	Predict meaning or value in the text	Grade prediction sheet, initial
hypotheses		reflection
Gathering	Gather textual evidence	Quotation analysis table, peer
information		review
Testing hypotheses	Analyze and infer meaning	Critical literature essay,
		discussion presentation
Concluding and	Articulate personal impact and value	Reflection portfolio, affective
reflecting	transformation	journal

Table 4. Design Structure of Guided Inquiry Learning Based Literature Evaluation Model

The design structure of the GIL based evaluation model in literature learning consists of six systematic stages designed to evaluate students holistically, covering cognitive, affective and reflective dimensions. The first stage, orientation, assesses students' initial engagement and readiness for the literary text. Next, problem and hypothesis formulation encourages students to formulate questions and value predictions that form the basis for exploring the meaning in the text. The exploration stage measures students' ability to trace literary evidence, while hypothesis testing assesses their ability to construct text-based arguments. Finally, the reflection and conclusion stage evaluates how students internalize values and reflect on the personal impact of the texts studied. This model has proven to be effective in promoting critical literacy and student character building (Hansen et al., 2019; Payu et al., 2022; Wardani et al., 2016).

## 3.4. Literature Evaluation Based on Guided Inquiry Learning as Strengthening Character Education

GIL-based literature evaluation has relevance to strengthening character education because it places students as active subjects who construct meaning through reflective, explorative and collaborative thinking processes. This approach not only measures cognitive knowledge, but also assesses the process of value internalization, moral understanding, and attitude transformation that occurs during students' interaction with learning materials, especially through literary texts. Through GIL-based evaluation, students are invited to formulate questions about moral issues in the text, build value hypotheses, explore the text to find evidence, and convey reflections on the values found in literary texts. This reflection stage is an important point in character education because it directs students to evaluate the characters' actions, reflect on universal values, such as honesty, tolerance, responsibility, and relate them to personal experiences. This supports personal and social discovery of meaning, which is more effective in shaping character than conventional evaluation models that only test memorization of concepts or theories.

GIL-based literature evaluation model is effective in strengthening students' ethical awareness and self-control through reflection journals and discussions (Wardani et al., 2016). The value-based inquiry approach strongly supports the formation of moral character and ethical thinking that becomes the basis for students' social action (Zeidler, 2024). In 21st century education, contextual and problem-based evaluation models are very suitable for developing social responsibility, tolerance and empathy among students (Mu'minah, 2021). In a technological era full of social and moral challenges, evaluation should not only focus on material mastery, but also be a space to assess the growth of values and personality. This model provides this space systematically and makes the evaluation process not only summative,

but also transformative. Thus, this model is relevant when used to improve character education because it is able to build value awareness from within students through authentic and meaningful learning experiences.

#### 3.5. Literature Evaluation Based Guided Inquiry Learning in Promoting Self-Reflection

GIL-based literature evaluation has an important role in encouraging students' self-reflection, especially in the context of character education and affective awareness development. In this approach, students are not only invited to understand the content of the text cognitively, but also to explore and interpret the values contained in the text, and relate them to students' personal and social experiences. Each stage in this model, from orientation to reflection, provides an explorative space that can encourage students to ask questions, build interpretations, and evaluate the actions and values of the characters personally. The evaluation process at the reflection stage makes students sensitive to humanitarian issues raised in literary works. Self-reflection is at the core of 21st century character education and this model provides a learning mechanism that leads students to realize how reading experiences can influence their views, attitudes and values (Meyer & Norman, 2020; Rosenhan & Galloway, 2019). For example, through critical questioning of the characters' actions in the story, students are trained to evaluate those actions within an ethical framework and compare them to their personal experiences.

Reflection is an important phase in the inquiry cycle that helps students make connections between new knowledge and student self-identity (Pedaste et al., 2015). This reflection strengthens character building and holistic understanding of values. The integration of inquiry and reflection in evaluation can lead to a deeper understanding of the personal and social meaning of learning (Rusche & Jason, 2011). Reflection-based learning allows students to experience transformative learning, which is learning that shapes self-identity through critical interaction with texts and social reality.

In literature learning, self-reflection becomes even more important as literary texts are essentially complex and value-filled representations of life. With this model, students are not only tested on their ability to recognize intrinsic elements such as plot or characters, but also assessed on their ability to reflect on the human experience portrayed in the text and how it shapes their own attitudes and personalities. Evaluation approaches that emphasize self-reflection can significantly improve students' social-emotional competencies, especially in the realm of value-based education (Archer-Kuhn et al., 2025). Thus, this model evaluation is not just a learning outcome assessment tool, but a transformative instrument that encourages students to become reflective, ethical, and self-aware readers. This makes the model a highly relevant and superior evaluation approach in literary education that leads to holistic character building.

## 3.6. Advantages of the Guided Inquiry Learning-Based Literary Learning Evaluation Model

The findings of this study reinforce the results of previous studies on the effectiveness of the GIL approach in learning, particularly in forming deep understanding, critical thinking skills, and character building (Archer-Kuhn et al., 2025; Kuhlthau et al., 2015). In literature learning, GIL not only enables students to understand the structure of the text, but also encourages students to construct personal meaning and reflect on values. Previous research has emphasized that GIL encourages a structured exploration and reflection-based learning process. This model has proven effective in strengthening students' critical literacy and building meaningful learning experiences. This is in line with the findings of this study, which show that GIL can integrate cognitive, affective, and reflective aspects in the evaluation of literature learning.

Previous research has shown that GIL in teaching enables students to formulate meaningful questions and make ethical judgments about characters in stories (Hansen et al., 2019). This process not only enhances higher-order thinking skills but also strengthens students' social and ethical awareness, as reflected in the reflection stage of this evaluation model. Unlike conventional approaches that tend to assess the final product of learning (summative), GIL provides space for continuous assessment (formative-reflective). This aligns with the inquiry-based learning cycle framework, which emphasizes the importance of the reflection stage (Pedaste et al., 2015). The value-oriented inquiry-based approach encourages students to form moral judgments through active engagement with complex issues in the text (Zeidler, 2024). This supports the GIL structure in this evaluation model, which includes value hypotheses, ethical discussions, and reflective journals.

The GIL model in literary learning assessment offers several advantages, namely measuring value transformation, providing space for personal exploration, and encouraging social interaction. The GIL model assesses the thinking process and personal meaning formation through inquiry stages, from orientation to reflection. This differs from authentic rubrics, which tend to assess final products without comprehensively recording students' cognitive and affective processes. This model ensures that students not only demonstrate their abilities but also explore moral values, formulate value hypotheses, and evaluate life experiences from texts. Meanwhile, performative assessment focuses solely on students' creative expressions. This model positions evaluation as a means of ethical and social transformation for students, not merely to assess academic abilities. This makes it more effective in addressing the needs of 21st-century character education in line with the direction of the *Kurikulum Merdeka*.

Based on the research results, the GIL-based literature learning evaluation model can make a significant contribution in exploring and strengthening character values and students' reflective abilities. Through the application of Guided Inquiry Learning syntax consisting of orientation, problem formulation, hypothesis formulation, data collection, hypothesis testing, and conclusion, students are not only guided to understand literary texts structurally and thematically, but also invited to interpret the moral values, emotions, and personal meanings of the texts read. GIL-based evaluation allows for an authentic and open-ended assessment process, where students have the space to deliver critical responses, construct arguments based on the values found in the text, and reflect on the relationship between the experiences in the text and the reality of their own lives. This is crucial for shaping students' social sensitivity, empathy and self-awareness as part of strengthening character through literature. This model also provides a paradigm shift in evaluation from simply testing cognitive understanding towards a comprehensive assessment that includes affective and reflective aspects. In other words, evaluation is no longer seen as the end of learning, but an integral part of a deep and meaningful learning process.

# 4. CONCLUSION

The GIL-based literature learning evaluation model is able to provide a more comprehensive and meaningful approach to the process of learning literature. This model not only assesses students' understanding of the content of the story, but also assesses how students are able to explore life values from the text, reflect on them, and relate them to personal experiences. With six main steps, namely orientation, formulating problems, formulating conjectures, gathering information, testing conjectures, and concluding, this model encourages students to actively think, ask questions, analyze, and reflect. This helps students not only become smart readers, but also individuals with better character, empathy, and self-awareness. Therefore, GIL-based evaluation is very relevant to be used in literature learning to strengthen character education, improve critical thinking skills, and shape students into reflective and resilient individuals in facing the challenges of the times. However, this study has limitations

because the model has not been empirically tested in the classroom through field studies or educational experiments. The findings are still conceptual and theoretical in nature, so the effectiveness of the model's implementation cannot be claimed comprehensively. Further research is highly recommended to develop GIL-based evaluation instruments and conduct empirical tests of the model to measure its validity and reliability.

#### REFERENCES

- Agustini, A., Rahmawati, S., Annisha, D., Tobondo, Y. A., Gradini, E., Effendi, E., ... Zainal, Z. (2024). Inquiry-Based Learning dalam Kurikulum Merdeka. *Penerbit Mifandi Mandiri Digital*, 1(01). https://doi.org/http://jurnal.mifandimandiri.com/index.php/penerbitmmd/article/view/112
- Alfarisy, S. J., & Iswandi. (2025). Integration of Character Education Values in Islamic Religious Education Learning at School. *Multidisciplinary Indonesian Center Journal (MICJO)*, 2(2), 1503–1509. https://doi.org/10.62567/micjo.v2i2.660
- Andersen, R., & Rustad, M. (2022). Using Minecraft as an educational tool for supporting collaboration as a 21st century skill. *Computers and Education Open*, 3, 100094. https://doi.org/10.1016/J.CAEO.2022.100094
- Archer-Kuhn, B., Beltrano, N., Wang, J., & Esmaeili, S. (2025). Achieving Critical Life Skills with Inquiry-Based Learning in Social Work Education: Self and Peer Assessment Reports. *Journal of Teaching in Social Work*, 45(1), 52–76. https://doi.org/10.1080/08841233.2024.2433787
- Aurumajeda, T., Nurhidayat, M., & Aprianti, E. (2025). The Effectiveness of P5 Pop-Up Books in Improving Understanding of Pancasila Values in Kindergarten. *Jurnal PG-PAUD Trunojoyo: Jurnal Pendidikan Dan Pembelajaran Anak Usia Dini*, 12(1), 17–30. https://doi.org/https://doi.org/10.21107/pgpaudtrunojoyo.v12i1.28635
- Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.
- Damayanti, E., Suhanda, H., & Suryatna, A. (2022). Analisis Potensi Lks Praktikum Berbasis Inkuiri Terbimbing Pada Topik Identifikasi Protein Dalam Bahan Makanan Untuk Mengembangkan Keterampilan Berpikir Kritis. *Jurnal Riset Dan Praktik Pendidikan Kimia*, 9(1), 24–36. https://doi.org/10.17509/jrppk.v9i1.52271
- Dass, R. (2014). Literature and the 21st Century Learner. *Procedia Social and Behavioral Sciences*, 123, 289–298. https://doi.org/10.1016/J.SBSPRO.2014.01.1426
- Dewi, P. S. (2016). Perspektif Guru Sebagai Implementasi Pembelajaran inkuiri terbuka dan inkuiri terbimbing terhadap sikap ilmiah dalam pembelajaran sains. *Tadris: Jurnal Keguruan Dan Ilmu Tarbiyah*, 1(2), 179–186.
- Fitzgelard, A. R., Sasmi, D. A. A., & Susanto, D. (2023). Representasi Kebijakan Pendidikan di Indonesia dalam Novel Bakri, Sang Guru Demonstran Karya Isno El Kayyis. *BELAJAR BAHASA: Jurnal Ilmiah Program Studi Pendidikan Bahasa Dan Sastra Indonesia, 8*(2), 123–136. https://doi.org/10.32528/bb.v8i2.841
- Gaol, N. T. L. (2023). School leadership in Indonesia: A systematic literature review. *Educational Management Administration & Leadership*, 51(4), 831–848. https://doi.org/https://doi.org/10.1177/17411432211010811
- Hakim, A. (2024). Model Perencanaan Pembelajaran Pai yang Berorientasi Pada Pengembangan Spiritualitas dan Akhlak Siswa. *Khatulistiwa*, 5(2), 1–15. https://doi.org/10.69901/kh.v5i2.280
- Hansen, T. I., Elf, N. F., Gissel, S. T., & Steffensen, T. (2019). Designing and testing a new concept for inquiry-based literature teaching: Design Principles, Development and Adaptation of a Large-Scale Intervention Study in Denmark. Contribution to a special issue Systematically Designed Literature Classroom Interventions: Design Principles, Development and Implementation, edited by Marloes Schrijvers, Karen Murphy, and Gert Rijlaarsdam. L1-Educational Studies in Language and Literature, 19, 1–32.

- Harahap, S. H., Sirait, E. E., Simangunsong, E. S. T., Ramadani, F. A., Pasaribu, K. D. A., Sinaga, D. C., & Sitorus, J. B. (2025). Analisis Sintaks Desain Evaluasi Pembelajaran Sastra Melalui Model Project Based Learning (PjBL) di UPT SMP Negeri 17 Medan. *Pragmatik: Jurnal Rumpun Ilmu Bahasa Dan Pendidikan*, 3(1), 52–72. https://doi.org/https://doi.org/10.61132/pragmatik.v3i1.1205
- Kartikasari, A. (2016). Peningkatan Minat Baca Karya Sastra Cerpen melalui Pendekatan Sinektik pada Siswa Kelas VI. *Premiere Educandum: Jurnal Pendidikan Dasar Dan Pembelajaran*, 4(01). https://doi.org/10.25273/pe.v4i01.306
- Kuhlthau, C. C., Maniotes, L. K., & Caspari, A. K. (2015). *Guided inquiry: Learning in the 21st century*. Bloomsbury Publishing USA.
- Le, S. K., Hlaing, S. N., & Ya, K. Z. (2022). 21st-century competences and learning that Technical and vocational training. *Journal of Engineering Researcher and Lecturer*, 1(1), 1–6. https://doi.org/https://doi.org/10.58712/jerel.v1i1.4
- Lee, C. D. (2021). Inquiry and learning in literature. In *International handbook of inquiry and learning* (pp. 277–295). Routledge. https://doi.org/https://www.taylorfrancis.com/chapters/edit/10.4324/9781315685779-19/inquiry-learning-literature-carol-lee
- Lidya, S., Tulak, J. T. L., & Putri, N. Q. H. (2025). Integrasi Asesmen Autentik Dalam Pembelajaran Sastra: Meningkatkan Kesadaran Lingkungan Melalui Prosa Fiksi Pesut Mahakam. *JIM: Jurnal Ilmu Multidisiplin*, 1(2), 81–85. https://doi.org/https://jurnalinspirasimodern.com/index.php/JIM/article/view/166
- Linggasari, E., & Rochaendi, E. (2022). Indonesian language learning in elementary schools through life skills education model. *Literasi: Jurnal Ilmu Pendidikan*, 13(1), 40–62. https://doi.org/http://dx.doi.org/10.21927/literasi.2022.13(1).40-62
- Mazidah, I. N., Widodo, W., & Tukiran. (2023). Profile of the Implementation of Guided Inquiry-Based Interactive E-Module in Science Learning. *Studies in Philosophy of Science and Education*, 4(2), 43–55. https://doi.org/10.46627/sipose.v4i2.275
- Meyer, M. W., & Norman, D. (2020). Changing Design Education for the 21st Century. *She Ji: The Journal of Design, Economics, and Innovation*, 6(1), 13–49. https://doi.org/10.1016/J.SHEJI.2019.12.002
- Meylani, R. (2023). A comparative analysis of traditional and modern approaches to assessment and evaluation in education. *Batı Anadolu Eğitim Bilimleri Dergisi*, 15(1), 520–555. https://doi.org/https://doi.org/10.51460/baebd.1386737
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). Qualitative data analysis: A methods sourcebook (3rd ed., Terj. Tjetjep Rohindi Rohidi)). UI-Press.
- Monib, W. K., Qazi, A., & Apong, R. A. (2024). Learning Beyond Boundaries: A Systematic Review and a Novel Framework for Improving Learning Outcomes. *Heliyon*, 11(2). https://doi.org/https://www.cell.com/heliyon/fulltext/S2405-8440(24)17444-0
- Muliastrini, N. K. E. (2020). New Literacy sebagai upaya peningkatan mutu pendidikan sekolah dasar di abad 21. *Jurnal Pendidikan Dasar Indonesia*, 4(1), 115–125. https://doi.org/https://doi.org/10.23887/jpdi.v4i1.3114
- Mu'minah, I. H. (2021). Studi literatur: pembelajaran abad-21 melalui pendekatan steam (science, technology, engineering, art, and mathematics) dalam menyongsong era society 5.0. *Prosiding Seminar Nasional Pendidikan*, 3, 584–594. https://doi.org/https://prosiding.unma.ac.id/index.php/semnasfkip/article/view/654
- Muzaki, R. F. S., Surahman, C., Sumarna, E., Amanda, R. R., & Nazhan, F. A. (2024). Pendekatan Inquiry Learning dalam Perspektif QS. Al-Mulk Ayat 10: Analisis Kajian Tafsir Tarbawi. *Ta'wiluna: Jurnal Ilmu Al-Qur'an, Tafsir Dan Pemikiran Islam, 5*(3), 560–578. https://doi.org/10.58401/takwiluna.v5i3.1771
- Nainggolan, S. (2022). Students' Competence Needs Analysis in Curriculum for Facing 21st Century Education. *AL-ISHLAH: Jurnal Pendidikan*, 14(2), 2099–2106. https://doi.org/10.35445/alishlah.v14i2.1997

- Payu, C. S., Mursalin, M., Abbas, N., Umar, M. K., Yusuf, F. M., & Odja, A. H. (2022). Development of Guided Inquiry Learning Model Based on Critical Questions to Improve Critical Thinking on the Concept of Temperature and Heat. *Journal of Humanities and Social Sciences Studies*, 4(2), 174–180. https://doi.org/10.32996/jhsss.2022.4.2.21
- Pedaste, M., Mäeots, M., Siiman, L. A., de Jong, T., van Riesen, S. A. N., Kamp, E. T., ... Tsourlidaki, E. (2015). Phases of inquiry-based learning: Definitions and the inquiry cycle. *Educational Research Review*, 14, 47–61. https://doi.org/10.1016/J.EDUREV.2015.02.003
- Peña-Ayala, A. (2021). A learning design cooperative framework to instill 21st century education. *Telematics and Informatics*, 62, 101632. https://doi.org/10.1016/J.TELE.2021.101632
- Pratiwi, A. K., Makhrus, M., & Zuhdi, M. (2021). The effectiveness of learning media based on the guided inquiry model to improve students science literature skills and scientific attitudes. *Jurnal Pijar Mipa*, 16(5), 636–639. https://doi.org/https://doi.org/10.29303/jpm.v16i5.3041
- Purwanto, P., & Tjahjono, T. (2021). Pendidikan Bahasa dan Sastra sebagai Pengarakteran (Language and Literature Education as a Form of Characterization). *Kumpulan Artikel Ilmiah Rumpun Ekonomi Dan Ilmu Sosial*, 1(2), 46–77. https://doi.org/10.19166/kairos.v1i2.3984
- Risman, A., & Santoso, S. (2017). Development of guided inquiry-based accounting learning module to improve creative and disciplin character. *Eprints. Uny. Ac. Id*, 21–22.
- Ritiauw, S. P., Mahananingtyas, E., & Ode, T. (2021). Penggunaan model inkuiri sosial untuk meningkatkan kecerdasan sosial siswa kelas V. *Sekolah Dasar: Kajian Teori Dan Praktik Pendidikan*, 30(1), 32.
- Rodriguez, J.-M. G., Hunter, K. H., Scharlott, L. J., & Becker, N. M. (2020). A Review of Research on Process Oriented Guided Inquiry Learning: Implications for Research and Practice. *Journal of Chemical Education*, 97(10), 3506–3520. https://doi.org/10.1021/acs.jchemed.0c00355
- Rosenhan, C., & Galloway, N. (2019). Creativity, self-reflection and subversion: poetry writing for Global Englishes awareness raising. *System*, 84, 1–13. https://doi.org/10.1016/J.SYSTEM.2019.04.005
- Rusche, S. N., & Jason, K. (2011). "You have to absorb yourself in it" using inquiry and reflection to promote student learning and self-knowledge. *Teaching Sociology*, 39(4), 338–353. https://doi.org/http://dx.doi.org/10.2307/41308965
- Soltis, R., Verlinden, N., Kruger, N., Carroll, A., & Trumbo, T. (2015). Process-Oriented Guided Inquiry Learning Strategy Enhances Students' Higher Level Thinking Skills in a Pharmaceutical Sciences Course. *American Journal of Pharmaceutical Education*, 79(1), 11. https://doi.org/10.5688/AJPE79111
- Sundana, L., Sastromiharjo, A., & Sumiyadi, S. (2018). Sastra Didaktis Dalam Pembelajaran Apresiasi Sastra. *Seminar Internasional Riksa Bahasa*, 1085–1094.
- Suradi, A. (2018). Pendidikan Berbasis Multikultural dalam Pelestarian Kebudayaan Lokal Nusantara di Era Globalisasi. *Wahana Akademika: Jurnal Studi Islam Dan Sosial*, *5*(1), 111. https://doi.org/10.21580/wa.v5i1.2566
- Syarifuddin, S., Iriani, I., & Akbar, L. A. (2023). Characteristics, Approaches, and Competency Learning Processes of Students in The 21st Century. *12 Waiheru*, *9*(1), 35–44. https://doi.org/10.47655/12waiheru.v9i1.91
- Tarozzi, M. (2022). *Global Education Digest* 2022 (Fifth Edition). London: Development Education Research Centre.
- Todorova, S. (2024). 21st Century Skills in the Context of Education. *Cultural and Historical Heritage: Preservation, Presentation, Digitalization, 10*(1), 101–110. https://doi.org/10.55630/KINJ.2024.100109
- Varas, D., Santana, M., Nussbaum, M., Claro, S., & Imbarack, P. (2023). Teachers' strategies and challenges in teaching 21st century skills: Little common understanding. *Thinking Skills and Creativity*, 48, 101289. https://doi.org/10.1016/J.TSC.2023.101289
- Voogt, J., & Roblin, N. P. (2012). A comparative analysis of international frameworks for 21 st century competences: Implications for national curriculum policies. *Journal of Curriculum Studies*, 44(3), 299–321. https://doi.org/10.1080/00220272.2012.668938

- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge: Harvard University Press.
- Wardani, S., Nurhayati, S., & Safitri, A. (2016). The Effectiveness of the Guided Inquiry Learning Module towards Students' Character and Concept Understanding. *International Journal of Science and Research (IJSR)*, 5(6), 1589–1594. https://doi.org/https://doi.org/10.21275/V5I6.NOV164512
- Weirich, S., Bachinger, A., Trendtel, M., & Krelle, M. (2019). Listening comprehension tests in Germany and Austria—Research report and critical review. *L1 Educational Studies in Language and Literature*, 19, Running Issue(Running Issue), 1–26. https://doi.org/10.17239/L1ESLL-2019.19.03.05
- Wibawa, B., & Wirasti, M. (2025). Personalized Learning Systems: essential components and their impact on Learning Outcomes. *Journal of E-Learning and Knowledge Society*, 21(1). https://doi.org/https://doi.org/10.20368/1971-8829/1135981
- Zeidler, D. L. (2024). A Moral Inquiry Into Epistemic Insights in Science Education: Personal and Global Perspectives of Socioscientific Issues (Vol. 61). Springer Nature.
- Zheng, L., Shi, Z., Fu, Z., & Liu, S. (2025). The Impacts of Intelligent Feedback on Learning Achievements and Learning Perceptions in Inquiry-Based Science Learning: A Meta-Analysis of Studies from 2013 to 2023. *Journal of Science Education and Technology*. https://doi.org/10.1007/s10956-025-10204-5
- Zuhriyah, I. A., Wahyuni, H., Al Aluf, W., Nasir, M., Bukhori, I., Firdaus, Y. I., ... Nazihah, N. (2025). *Pengembangan Evaluasi Pembelajaran Di Madrasah Ibtidaiyah (MI)*. PT. Penerbit Qriset Indonesia.