

Teacher and Student Needs Profile as the Basis for Developing the IRMa Model in Narrative Writing Instruction in Elementary Schools in Tasikmalaya City

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Abstract

Narrative writing skills are a fundamental component of literacy development in elementary education; however, many students still experience difficulties in organizing story structures, developing ideas coherently, and revising their writing independently. This study aims to analyze the profile of teachers' and students' needs as the basis for developing the IRMa (Interactive, Reflective, Mastery Self-Evaluation) learning model in narrative writing instruction in elementary schools in Tasikmalaya City. The IRMa model is designed as a process-oriented learning framework that integrates interactive learning activities, structured reflection, and mastery-based self-evaluation to support students' writing development. This research employed a Research and Development (R&D) approach, focusing on the needs analysis stage through a descriptive quantitative design. Data were collected from 123 elementary school teachers using a closed-ended questionnaire based on a five-point Likert scale, measuring students' writing difficulties, learning conditions, and teachers' needs for a structured and visually supported learning model. Data were analyzed using descriptive statistics, Pearson correlation, and multiple linear regression. The results indicate that students' narrative writing difficulties were in the high category ($M = 3.57$; $SD = 0.62$), and learning processes were perceived as insufficiently structured ($M = 3.69$; $SD = 0.58$). Teachers expressed very high needs for a step-by-step learning model ($M = 4.43$; $SD = 0.51$) and visual stimuli ($M = 4.53$; $SD = 0.47$). Correlation analysis revealed a significant relationship between students' difficulties and the need for a structured model ($r = 0.62$; $p < 0.001$), while regression analysis showed that learning difficulties and conditions explained 58% of the variance in model needs ($R^2 = 0.58$). These findings highlight the urgency of developing the IRMa model as a contextual and systematic instructional design grounded in empirical needs, offering a novel contribution by integrating interaction, reflection, and mastery self-evaluation within a unified framework to enhance the quality of narrative writing instruction in elementary education.

Keywords:

Elementary School; IRMa Model; Learning Model; Narrative Writing; Needs Analysis

A. Introduction

Narrative writing skills are a fundamental component of literacy development at the elementary school level, as they contribute to students' critical thinking, creativity, and written

communication abilities. Empirical evidence indicates that writing proficiency in early education is strongly associated with long-term academic achievement and higher-order thinking skills (Graham, 2023; Kim & Graham, 2022). In the context of 21st-

century education, strengthening literacy—particularly reflective and structured written communication—has become a central priority in global educational reform.

Despite its importance, writing instruction in elementary schools continues to face persistent challenges. Previous studies have consistently shown that students struggle to develop coherent narrative structures, elaborate ideas, and independently revise their writing (Cordeiro et al., 2020; Kim & Graham, 2022; Limpo et al., 2014). In addition, the implementation of process-based writing instruction remains suboptimal, particularly in supporting students' revision and reflective practices (Graham, 2023). As a result, writing instruction tends to be oriented toward the final product rather than the process of text construction.

These challenges are also evident in the context of elementary schools in Tasikmalaya City. Findings from an exploratory study reveal that students experience difficulties in organizing storylines, clarifying characters, and conveying messages effectively. Teachers further report that writing instruction is not yet systematically structured and does not adequately facilitate reflection and self-evaluation. At the same time, there is a strong demand for a gradual, interactive, and visually supported learning model. This aligns with recent studies highlighting the effectiveness of visual scaffolding and explicit instructional strategies in improving narrative coherence and text organization (Altamimi, 2024; Andrade Tacuri & Valladares Pugo, 2024; Wu & Arabah, 2023).

From a theoretical perspective, effective writing instruction should integrate several key principles. Process-based writing emphasizes iterative stages of planning, drafting, revising, and editing (Graham et al., 2023). Social constructivist theory underscores the importance of interaction and dialogue in knowledge construction (Lantolf et al., 2024; Pemberton, 2024), while self-regulated

learning theory highlights the role of reflection and self-evaluation in fostering independent learning (Efklides & Schwartz, 2024; Tinajero et al., 2024). In addition, mastery learning emphasizes structured feedback and repeated opportunities for improvement to achieve learning completeness (Xu et al., 2023).

However, a critical gap remains between these theoretical frameworks and classroom practices. Writing instruction often lacks structured scaffolding, does not systematically integrate reflection, and provides limited opportunities for mastery-based improvement. Moreover, most existing studies focus on the effectiveness of instructional models rather than on needs-based model development grounded in empirical classroom conditions. This indicates the necessity of designing a learning model that is not only theoretically sound but also contextually responsive to the needs of teachers and students.

In response to this gap, the IRMA (Interactive, Reflective, Mastery Self-Evaluation) Model is proposed as an integrative instructional framework that combines interactive learning, structured reflection, and mastery-based self-evaluation. By grounding its development in the profile of teachers' and students' needs, the model is expected to provide a more contextual, applicable, and systematic approach to narrative writing instruction in elementary schools.

Academically, this study contributes to the limited body of research on needs assessment-based literacy model development in primary education. Practically, it offers a structured instructional design to enhance the writing process and outcomes. Socially, it supports the development of a reflective, critical, and communicative generation through strengthened literacy education.

Based on these considerations, this study is guided by the following research questions: What are the profiles of students' difficulties in narrative writing? How do teachers perceive the current conditions of writing instruction? What are teachers'

needs for a structured and visually supported learning model? To what extent do students' difficulties and learning conditions influence the need for model development? And how can these needs be translated into the conceptual design of the IRMa Model?

B. METHOD

This study uses a Research and Development (R&D) approach with an initial stage of descriptive quantitative study through needs assessment. The R&D approach was chosen because this study aims not only to describe the phenomenon but also to produce a product in the form of a learning model that is systematically developed based on empirical needs in the field. A needs-based educational development model is considered effective in ensuring the relevance and contextuality of learning design (Plomp, 2013; Reiser et al., 2024; Thurner & Böttcher, 2022). The stage reported in this article focuses on needs analysis as a conceptual and empirical basis for designing the IRMa (Interactive, Reflective, Mastery Self-Evaluation) Model.

The research was conducted in several public elementary schools in Tasikmalaya City, West Java, Indonesia, in the odd semester of the 2025/2026 academic year. The research population was elementary school teachers who taught Indonesian language. The research sample consisted of 123 teachers selected using purposive sampling with the following criteria: actively teaching grades IV or V, having at least three years of teaching experience, and having experience teaching narrative writing. The use of purposive sampling in educational research aims to obtain relevant and contextual data in accordance with the research focus (Creswell, 2021; Harvey et al., 2023).

Data collection was conducted using a closed-ended questionnaire instrument based on a five-point Likert scale. The instrument was developed based on theoretical indicators of process-based

writing instruction, self-regulated learning, and mastery learning, which emphasize interaction, reflection, and self-evaluation as essential components in improving writing quality (Taber, 2018; Teng, 2025). The instrument items covered aspects of students' difficulties in narrative writing, evaluation of the learning process, and teachers' needs for a systematic and visually supported learning model.

The content validity of the instrument was established through expert judgment by two language education experts, focusing on several key indicators, namely: (1) relevance of items to the construct of narrative writing skills, (2) clarity and precision of item wording, (3) alignment with theoretical dimensions of process writing, self-regulated learning, and mastery learning, (4) appropriateness of items with the context of elementary school learning, and (5) representativeness of items in capturing the needs of teachers and students. Each item was reviewed and refined based on expert feedback to ensure conceptual accuracy and contextual suitability. Furthermore, the reliability of the instrument was tested using Cronbach's Alpha coefficient to ensure internal consistency, resulting in a value exceeding 0.80, which indicates high reliability (Abubakar, 2021).

The data were analyzed using descriptive statistical techniques by calculating the mean, standard deviation, and interpretation categories of scores based on the Likert scale interval. Descriptive analysis was used to identify the urgency of the problem and the level of need for model development. This needs analysis approach aims to identify the gap between the actual learning conditions and the theoretically expected ideal conditions (Grace Kim, 2022). The results of the analysis were then used as the basis for designing the syntax and components of the IRMa Model, which integrates learning interactions, structured reflection, and self-evaluation based on mastery.

The entire research process was carried out in accordance with the

principles of educational research ethics, including voluntary participation consent, confidentiality of respondent identities, and the use of data solely for academic purposes (Fox, 2026). With this methodological approach, the research is expected to produce a strong empirical basis for the development of a contextual, systematic narrative writing learning model that is relevant to the needs of teachers and students in elementary schools in Tasikmalaya City.

C. RESULT AND DISCUSSION

1. Result

The results of the analysis of 123 elementary school teachers show that the level of difficulty students experience in writing narratives is in the high category, with an average score of 3.57 (SD = 0.62) on a scale of 1–5. The main difficulties lie in the ability to develop a coherent storyline and to independently revise their writing. At the same time, the learning process was also assessed as not yet fully structured, with an average score of 3.69 (SD = 0.58), indicating that learning still tends to be oriented towards the final product rather than the stages of the writing process. Conversely, the need for a step-by-step learning model showed a very high score (M = 4.43; SD = 0.51), as did the need for the use of visual stimuli in writing learning (M = 4.53; SD = 0.47). The high scores on the last two indicators confirm that there is a clear gap between the current learning conditions and the teachers' expectations for a more systematic and supportive learning model. Inferentially, Pearson's correlation test showed a significant relationship between the level of student difficulty and the need for a step-by-step learning model ($r = 0.62$; $p < 0.001$), as well as between unstructured learning and the need for visual stimuli ($r = 0.71$; $p < 0.001$), indicating that the higher the learning problems, the greater the need for structured pedagogical intervention. Further multiple linear regression analysis shows that student difficulty and learning conditions simultaneously can significantly predict the need for learning models ($R^2 =$

0.58 ; $F(2,120) = 83.45$; $p < 0.001$), which means that 58% of the variation in model needs can be explained by these two variables. In addition, the research instrument has excellent reliability with a Cronbach's Alpha value of 0.87, so that the data produced can be considered consistent and suitable for supporting the formulation of an empirically-based learning model. Add the statistical data in the form of a table or diagram below the explanation. The following statistical diagram can be placed below the analysis results explanation to strengthen the interpretation of the research data.

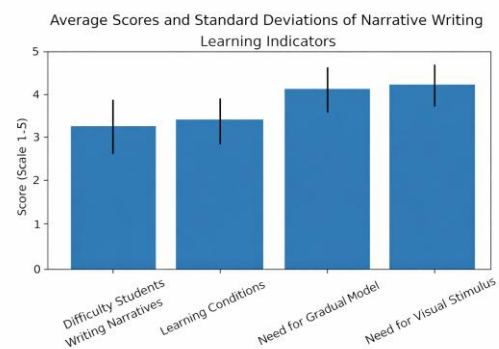


Figure 1. Average Score (Mean) for each indicator and Standard Deviation (SD)

The diagram above shows the average score (Mean) for each indicator along with the standard deviation (SD) as an error bar, allowing readers to see:

- The level of difficulty students have in writing narratives and the learning conditions are in the high category.
- The need for a step-by-step learning model and visual stimuli received the highest scores.
- Data variation is relatively stable ($SD < 1$), which reinforces the consistency of teachers' perceptions.

Based on the mean score diagram, it can be seen that the need for a step-by-step learning model received the highest score compared to other indicators. This descriptive finding is then reinforced by the Correlation and Linear Regression Diagram, which shows a positive relationship between the level of difficulty for students and the need to develop a learning model.

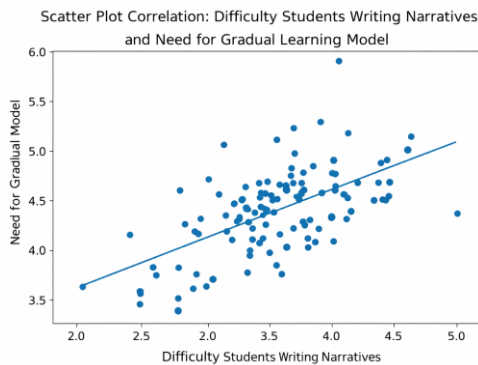


Figure 2. Correlation and Linear Regression Diagram

The scatter plot diagram shows a positive relationship between the level of difficulty students experience in writing narratives and the need for a step-by-step learning model. The linear regression line shows a tendency that the higher the level of difficulty experienced by students, the higher the teacher's need for a structured learning model. The data distribution pattern supports the results of the Pearson correlation test ($r = 0.62$; $p < 0.001$), which shows a significant relationship with a moderate to strong correlation strength.

2. Discussion

The results of this study indicate a significant pedagogical gap between narrative writing practices in elementary schools and the process-based writing approaches recommended in recent literature. The high level of difficulty students experience in developing storylines and revising their own work shows that writing instruction remains predominantly product-oriented rather than process-oriented. This finding confirms previous studies (Graham et al., 2022), which highlight the lack of structured instructional scaffolding as a central issue in elementary writing education. However, this study extends prior research by empirically demonstrating how these challenges are directly associated with teachers' perceived needs for structured and visually supported instructional models.

The high demand among teachers for step-by-step learning models and visual

stimuli suggests not only a pedagogical limitation but also a systemic gap in instructional design. While previous studies (Gillespie Rouse et al., 2021; Graham & Alves, 2021) have emphasized the effectiveness of visual scaffolding, they generally focus on intervention outcomes rather than the underlying needs that justify such interventions. In contrast, this study contributes a needs-based perspective by quantitatively linking students' writing difficulties with the urgency of implementing structured and visual learning approaches. This shift from effectiveness-based to needs-based evidence represents a critical advancement in the design of literacy instruction.

Furthermore, the low level of students' independent revision ability reinforces the importance of self-regulated learning frameworks, where reflection is a core mechanism of learning (Quinn et al., 2022). While prior studies (Guo et al., 2023; McKenna & Schachter, 2026) have established the importance of self-evaluation, this study reveals that the absence of structured reflective practices in classroom instruction leads to students' dependence on teacher feedback. This finding highlights a critical gap in existing instructional models, which often overlook the systematic integration of reflection and self-evaluation as part of the writing process.

In response to these empirical findings, the IRMa (Interactive-Reflective-Mastery Self-Evaluation) Model offers a novel conceptual contribution by integrating three key pedagogical dimensions—interaction, reflection, and mastery-based self-evaluation—into a unified instructional framework. Unlike existing models that tend to emphasize only one or two aspects (e.g., interaction in collaborative learning or reflection in metacognitive strategies), the IRMa model systematically combines these elements into a structured learning sequence. This integrative approach represents a significant theoretical advancement, as it bridges social constructivist learning principles,

metacognitive development, and mastery learning within a single coherent model.

The novelty of this study lies not only in the formulation of the IRMa model but also in its development process, which is grounded in empirical needs analysis rather than purely theoretical assumptions. This needs-based model development approach provides a more contextually responsive framework for instructional design, particularly in elementary literacy education. In contrast to previous studies that often adopt a top-down approach to model development, this research demonstrates the value of bottom-up design informed by teachers' and students' real classroom experiences (Guo et al., 2022; Rowe et al., 2022).

From a practical perspective, the findings offer a strong rationale for shifting from procedural writing instruction toward a more structured, reflective, and student-centered approach. The IRMa model has the potential to bridge the gap between process-based writing theory and classroom implementation by providing clear instructional stages that support interaction, guide reflection, and promote independent mastery. Therefore, the identified needs profile serves not merely as descriptive data but as a strategic foundation for developing adaptive, contextual, and sustainable literacy instruction models in elementary education.

D. CONCLUSION

This study concludes that narrative writing instruction in elementary schools in Tasikmalaya City still faces significant pedagogical challenges, particularly in students' ability to organize storylines coherently and to conduct independent revision of their writing. Learning practices are generally perceived as insufficiently structured and remain oriented toward final products rather than the stages of the writing process. These conditions indicate a clear gap between current classroom practices and the principles of process-based writing instruction emphasized in

contemporary literacy theory. The needs analysis further reveals that teachers demonstrate a very high demand for a step-by-step learning model supported by visual stimuli and structured reflection activities. Statistical findings confirm that students' writing difficulties and unstructured learning conditions significantly predict the need for developing a new instructional model. This evidence establishes that the profile of teachers' and students' needs provides a strong empirical and conceptual foundation for the development of the IRMa (Interactive, Reflective, Mastery Self-Evaluation) Model, which is positioned as a contextual and relevant instructional framework integrating interaction, reflective practice, and mastery-based self-evaluation to support students' narrative writing development more systematically.

From a practical perspective, the IRMa model offers concrete pedagogical implications for teachers in designing and implementing writing instruction. Teachers are encouraged to organize learning activities into clear and structured stages, beginning with interactive idea exploration through discussion and visual scaffolding, followed by guided writing and structured reflection, and culminating in mastery-based self-evaluation activities. This approach enables teachers to move beyond product-oriented practices by facilitating continuous student engagement, encouraging metacognitive awareness, and promoting independent revision skills. In addition, the integration of visual supports such as story maps, graphic organizers, and guided prompts can assist students in developing more coherent and elaborated narratives. The model also provides a practical framework for teachers to monitor student progress and provide formative feedback aligned with mastery criteria.

At the institutional level, schools are encouraged to support teachers through professional development programs that enhance their competence in implementing structured, process-oriented writing instruction supported by visual and reflective strategies. For policymakers and

curriculum developers, the findings of this study offer an empirical basis for designing literacy programs that are responsive to classroom realities and aligned with contemporary learning theories. Furthermore, future research is recommended to proceed to the subsequent stages of Research and Development, including model design, implementation, and experimental testing of the IRMa model in classroom settings. Such studies are expected to examine its impact on students' narrative writing quality, learning motivation, and self-regulated learning skills. Through continuous refinement and validation, the IRMa model holds strong potential to contribute meaningfully to the improvement of narrative writing instruction and to the advancement of literacy education at the elementary school level.

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