Developing Multimodal Teaching Materials for Persuasive Writing within a Genre-Based Pedagogy

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Abstract

This study aim to develop and validate multimodal teaching materials integrated with a Genre-Based Approach to strengthen junior-secondary persuasive writing in bahasa Indonesian class. Motivated by gaps in monomodal textbooks and inconsistent enactment of genre pedagogy, we followed a Research and Development (R&D) design using the ADDIE model. The digital e-module operationalizes Building Knowledge of the Field, Modelling, Joint Construction, and Independent Construction, and coordinates text, images, layout, and audio so verbal and visual resources support the same persuasive functions. A limited classroom trial with Grade VIII students (n = 39) examined feasibility and learning movement. Evaluation combined expert validation of content and material, language and readability, and media and design, teacher and student user-response indices, and curriculum-aligned pre and posttests. Analyses were descriptive. Expert validation yielded 92.76 %, categorized as very feasible. Teacher reported 93.35 %, also very feasible. Students reported 82.75 %, feasible. Mean scores increased from 65.22 % on the pretest to 85.74 % on the posttest, a gain of 20.51 points, with an average normalized gain of 0.61 indicating medium effectiveness. Findings suggest that explicit genre scaffolding coupled with principled multimodal orchestration is classroom-ready and educationally valuable. Recommendations include clearer stepwise drafting prompts, compact lexis banks for stance, and stronger intermodal signalling.

Keywords: *Multimodal teaching materials, Genre-Based Approach, Persuasive writing;, Digital e module, Merdeka Curriculum*

Introduction

Social media has become a multimodal arena in which persuasive meanings are orchestrated through text, image, audio, and video. Platforms such as TikTok, Instagram, and YouTube enable messages that feel personal yet scale to mass audiences, a phenomenon scholars call mass interpersonal persuasion (Fogg, 2008; Flanagin, 2017), often leveraging visual metaphors and affective appeals (Hudders & Lou, 2022). These dynamics shape commercial communication as well as civic and political orientations, particularly among younger users (Peter, 2023), and permeate everyday interactions on platforms such as Facebook (Stepaniuk & Jarosz, 2021). In this environment, preparing students to analyze and compose persuasive messages across multiple modes is a pressing literacy priority (Weeks et al., 2015). Evidence from Indonesian classrooms similarly indicates that interactive and mobile media can support writing development and language learning, which reinforces the need for principled multimodal composition in schooling (Hardiana, Risnawati, & Sa'adah, 2024; Amelia & Sukasih, 2025).

These developments have direct implications for schooling, particularly for multimodal literacy. Multimodal literacy now extends beyond decoding verbal text to evaluating the social, media, and affective contexts that structure meaning (Jones & Hafner, 2022). Assessment research has introduced cognitive diagnostic instruments with individualized feedback for receptive learning on multimodal texts, which signals the necessity of instruction and evaluation that explicitly address multimodal comprehension and production (Anisah & Amreta, 2024). Findings from multimedia learning also indicate that coordinated verbal–visual presentation enhances comprehension, retention, and transfer, providing a cognitive rationale for integrating images, layout, and audio with language in persuasive tasks (Mayer, 2021).

Despite these shifts, many writing classrooms still rely on conventional, monomodal materials that do not meet the needs of digitally native students (Hasanah & Laili, 2023; Ma'arif et al., 2023). Preliminary observations in a junior high school in Depok City showed that although teacher used tools such as Canva and YouTube, available materials did not systematically integrate a multimodal approach with a Genre-Based Approach (GBA). This gap is consequential because the Kurikulum Merdeka positions persuasive texts, including advertisements, slogans, and posters, as core outcomes in Phase D of bahasa Indonesian learning (Decree of the Head of the Education Standards, Curriculum, and Assessment Agency Number 032/H/KR/2024). National evidence also shows that students increasingly prefer digital over print resources, which implies the need for device-ready, multimodal materials (Widiastuti et al., 2022). Complementary needs analysis in digital advertising indicates that teachers face limited training, resources, and genre-specific modules for teaching advertisement texts, which underscores the necessity of new materials (Rahmawati et al., 2025).

A multimodal approach offers a theoretically grounded response to these conditions. Multimodality holds that each mode, including verbal, visual, and auditory, constitutes a semiotic system with distinct affordances, and that meaning emerges through intermodal interaction (Kress & van Leeuwen, 2006; Jewitt, 2005). The Cognitive Theory of Multimedia Learning further suggests that integrating verbal and visual information optimizes processing and learning (Mayer, 2021). Indonesian development studies consistently report that carefully designed, technology-supported environments, ranging from interactive multimedia to blended learning, improve the quality of writing processes and outcomes (Oktavia et al., 2023; Hardiana et al., 2024; Amelia & Sukasih, 2025).

A growing empirical base shows that multimodal learning strengthens writing quality, critical thinking, and learner initiative, for example through infographics (Kara, 2024) and student-produced fanfiction, videos, and podcasts (Haas & Tussey, 2023; Drewry, Clark, & Dyson, 2020). In persuasive writing specifically, multiple modes can amplify creativity, situate arguments socioculturally, and sharpen appeals to ethos, pathos, and logos (Prihantoro et al., 2022). Related research in Indonesia confirms that multimedia affordances such as images, audio, and video heighten engagement and comprehension across genres and levels, including poetry writing (Haslinda, 2024), news writing (Hardiana et al., 2024), and narrative writing (Amelia & Sukasih, 2025). These findings provide a strong rationale for multimodal supports in persuasive-writing instruction.

The Genre-Based Approach provides a complementary pedagogic architecture for teaching writing. Rooted in Systemic Functional Linguistics, which views language as meaning-making in social context, and English for Specific Purposes, GBA helps learners grasp the purpose, staging, and linguistic features of target genres (Halliday &

Matthiessen, 2014; Swales, 1990; Chen, 2021). Its cycle of Building Knowledge of the Field, Modelling the Text, Joint Construction, and Independent Construction offers explicit scaffolding for composing persuasive texts (Derewianka, 2003; Kemendikbudristek, 2024). Recent Indonesian scholarship shows that integrating SFL metalanguage with visual grammar within a GBA framework fosters students' critical reading of multimodal texts, a logic that can be extended to the design of materials for multimodal production in writing (Emiliasari et al., 2025).

Although multimodality and GBA each show clear benefits, few studies in Indonesia have integrated them into a single, validated, classroom-ready package for persuasive texts in bahasa Indonesian instruction. Much of the recent development work targets other genres or levels, including Smart Apps Creator-based narrative writing, poetry, scientific-article writing in blended environments, and news writing, or it emphasizes receptive assessment of multimodal texts rather than productive composition (Amelia & Sukasih, 2025; Haslinda, 2024; Oktavia et al., 2023; Hardiana et al., 2024; Anisah & Amreta, 2024). Needs analyses in digital advertising further underscore the scarcity of genre-specific, curriculum-aligned materials for persuasive writing in Phase D (Rahmawati et al., 2025). Consequently, there is a clear opportunity to operationalize GBA through multimodal resources and tasks that are tailored to the persuasive genre and aligned to Phase D outcomes.

This study addresses that opportunity by developing and validating multimodal teaching materials integrated with GBA for teaching persuasive texts, specifically advertisements, slogans, and posters, at the junior secondary level. The materials were designed to meet eligibility criteria and underwent expert validation for content, language, and media or design quality, drawing on current Indonesian practices for module specification and evidence-centered evaluation (Anisah & Amreta, 2024).

The study contributes a theoretically grounded design framework that fuses GBA stages with multimodal inputs and outputs for the persuasive genre, a digital and device-accessible module for flexible classroom and project-based learning, expert-validated materials with documented quality indicators to aid adoption, and direct alignment with Kurikulum Merdeka Phase D to ensure curricular fit. By illustrating how multimodal resources and GBA scaffolding work in concert, and by building on emerging Indonesian evidence in multimodal assessment and genre-based instruction (Emiliasari et al., 2025; Anisah & Amreta, 2024; Amelia & Sukasih, 2025; Haslinda, 2024; Oktavia et al., 2023; Hardiana et al., 2024; Widiastuti et al., 2022; Rahmawati et al., 2025), the study offers both a replicable pedagogic model and a practical teaching product for improving persuasive-writing instruction.

Method

This study used a research-and-development design based on the ADDIE model (Analyze, Design, Develop, Implement, Evaluate) as outlined by Branch (2009) to develop and validate multimodal, genre-based teaching materials for persuasive writing (advertisements, slogans, posters). The ADDIE model was chosen because it supports a systematic needs analysis, gradual product refinement, expert review, and classroom try-out that stay aligned with the needs of the actual users.

The research was conducted at SMP Negeri 17, Depok City. The needs analysis involved one Indonesian-language teacher and 42 Grade VIII students selected through intact-class sampling. The pilot implementation involved 39 Grade VIII-1 students taught by the same teacher to maintain instructional consistency. School permission was secured prior to data collection.

The analyze combined a documentary review of Independent Curriculum (Phase D) outcomes with an empirical needs analysis. Data were gathered through semi-structured teacher interviews, a student questionnaire administered to 39 learners, and non-participant classroom observations focusing on current materials, media, and methods. The analysis identified learners' difficulties in idea generation, text organization, and persuasive language, as well as constraints and preferences regarding multimodal resources.

In the Design phase, learning outcomes were mapped onto the Genre-Based Approach (GBA) sequence—Building Knowledge of the Field, Modelling, Joint Construction, and Independent Construction. Task specifications, storyboards, and assessment rubrics were created to integrate multiple modes (text, images, audio, and video) throughout the persuasive-writing cycle. Digital authoring tools (e.g., Google Docs, Canva, Adobe Express, Voice Memo, CapCut) were used to realize the materials; tool choice did not alter task design or learning objectives.

In the develop phase, a prototype module was produced and submitted to three independent experts: a content and materials expert, a language and readability expert, and a media and design expert. Each expert completed a Likert-type validation instrument covering relevance, accuracy, clarity, sequencing, readability, usability, layout and typography, illustrative support, and integration of multimodality. Qualitative suggestions were recorded and incorporated into iterative revisions prior to field testing.

In the implement phase, the revised module was piloted with 39 Grade VIII-1 students over a complete GBA cycle. Students completed a curriculum-aligned pretest and posttest persuasive-writing task. Implementation fidelity (adherence to the planned stages, time-on-task, and use of multimodal resources) was monitored through classroom observation and brief post-lesson teacher interviews. Student and teacher user-response questionnaires captured perceived clarity, relevance, workload, and usefulness of the materials and accompanying activities.

In The evaluate phase, feasibility was determined using expert-validation indices and user-response indices computed as (obtained score ÷ maximum score) × 100%. Following Akbar (2013), thresholds were set as: 85–100% = very feasible (no revision); 70–84% = feasible (minor revision); 50–69% = less feasible (major revision); <50% = not feasible. Evaluation findings informed final product refinements.

The needs-analysis questionnaire elicited students' views on (a) material content and difficulty, (b) presentation of persuasive-text concepts, (c) graphics, and (d) use of multimodality, using a five-point Likert scale. Teacher and student interview protocols probed current practices, experiences with persuasive writing, media preferences, and expectations for effective materials. An observation checklist documented media, materials, and methods used in ongoing teaching.

Expert validation instruments comprised three checklists: (1) content and materials (accuracy, coverage, sequencing, task–outcome alignment), (2) language and readability (clarity, appropriacy, readability), and (3) media and design (usability, layout, typography, illustrations, integration of multimodality). Indicators were adapted from established materials-evaluation frameworks (e.g., Cunningsworth, 1995; Jahangard, 2007) and recent local studies (e.g., Gusvita, 2018; Rohmawati et al., 2024; Febriani, 2024).

User-response questionnaires for teacher and students assessed perceived relevance to learning outcomes, adequacy of materials and exercises, clarity of language, and graphical and multimodal quality (e.g., Sopani; Liyana, 2024). The learning-outcomes assessment comprised analytic rubrics for persuasive writing (audience and purpose,

structure and staging, strength of arguments and evidence, language features, and multimodal integration) applied to pretest and posttest scripts.

Quantitative data, which included expert validation results, teacher and student responses, and pre-/post-test scores, were analyzed using descriptive statistics. The validation and response indices were obtained with the formula (obtained score ÷ maximum score) × 100%, and the categories referred to Akbar (2013).

Table 1
Eligibility Crtiteria

Index (%)	Category	Revision guidance
85–100	Very feasible	Use as is (no revision)
70–84	Feasible	Minor revision
50–69	Less feasible	Major revision
< 50	Not feasible	Do not use

Learning outcomes were summarized at both the dimension and total levels using the mean, standard deviation, median, and minimum–maximum. Improvement was indexed by absolute gain (Post – Pre), percent gain [100 × (Post – Pre)/Pre], and normalized gain. The normalized gain (g) was calculated for each student as (Post – Pre)/(Max – Pre), averaged across students, and interpreted using Wahab (2021); Hakke (1998).

Table 2
N-Gain Result Criteria

N-gain value (g)	Category
$g \geq 0.70$	High
$0.30 < g < 0.70$	Medium
$g \leq 0.30$	Low

No inferential hypothesis testing was conducted. Qualitative evidence from interviews, observations, and open-ended responses was analyzed through data reduction, display, and conclusion drawing (Miles et al., 2014) to contextualize the descriptive findings and to inform product refinement.

School approval was obtained, teacher consent and parent/guardian consent were secured, and student assent was collected. Participation was voluntary, and all data were anonymized and reported in aggregate.

Results
Curriculum, textbooks, and classroom observations
Document analysis of the Merdeka Curriculum (Phase D) confirmed that persuasive writing is a targeted Writing Learning Outcome requiring logical, critical, and creative expression. Review of Grade VIII bahasa Indonesian open textbooks showed that genre-specific procedures for advertisements, slogans, and posters were not explicitly delineated, indicating partial operationalization of the Genre-Based Approach (GBA) cycle (Building Knowledge, Modelling, Joint Construction, Independent Construction) as described in the literature and national guidance (Derewianka, 2003; Kemendikbudristek, 2023). Classroom observations recorded frequent use of digital media but no consistent enactment of the full GBA cycle and limited explicit linking of persuasive diction with visual design. Teacher interviews highlighted difficulties in vocabulary selection, idea generation, and text structuring for persuasive writing. Student questionnaires ($n = 42$) indicated strong preferences for multimodal resources and generally positive views of exemplars; a subset reported that procedural steps remained insufficiently clear and required more explicit guidance.

These findings are reinforced by classroom teaching observations, which indicate that teachers have attempted to use digital media, but learning practices have not explicitly implemented the GBA cycle as a systematic technical procedure. Modeling has not detailed the relationship between persuasive diction and visual design elements. These findings emphasize that the use of media alone is not enough. In accordance with the theories of Kress & van Leeuwen (2006) and Jewitt (2005), meaning in multimodal texts depends not only on the presence of modes (text, images), but also on how these modes interact and are organized. Therefore, teaching materials are needed that systematically guide teachers and students in integrating multimodality into the writing process.

Analysis of Teacher and Students

Interviews with bahasa Indonesian teacher confirmed significant challenges in teaching persuasive texts. The main obstacles faced were students' low vocabulary and lack of creativity in designing persuasive sentences. Teachers also noted that despite using audiovisual media, students still struggled to apply the correct writing steps, indicating that media use alone was insufficient. This reaffirms the findings of Maulidia & Turistiani (2019), who also highlighted students' difficulties in expressing ideas and constructing effective text structures. Teacher's need for more structured and supportive teaching materials demonstrates a desire to optimize students' writing skills, in line with the importance of GBA in building a strong pedagogical framework (Nagao, 2018).

A questionnaire analysis of 42 students revealed varying perceptions. While 84.09% of students stated that the material was appropriate, and 77.27% found the examples of persuasive texts interesting, 15.91% felt that the steps in the teaching materials were unclear. These findings suggest that the mere presence of materials is not enough; more structured guidance is needed.

This is reinforced by interview findings that students have a strong preference for multimodal media. They feel that learning materials that combine text, images, sound, and video can increase the material's appeal and comprehension. This preference aligns with Mayer's (2021) Cognitive Theory of Multimedia Learning, which argues that presenting information in verbal and visual formats simultaneously can enhance comprehension, retention, and knowledge transfer. These findings also support Jewitt's (2005) argument that modern literacy requires individuals to interpret and produce messages through multiple media.
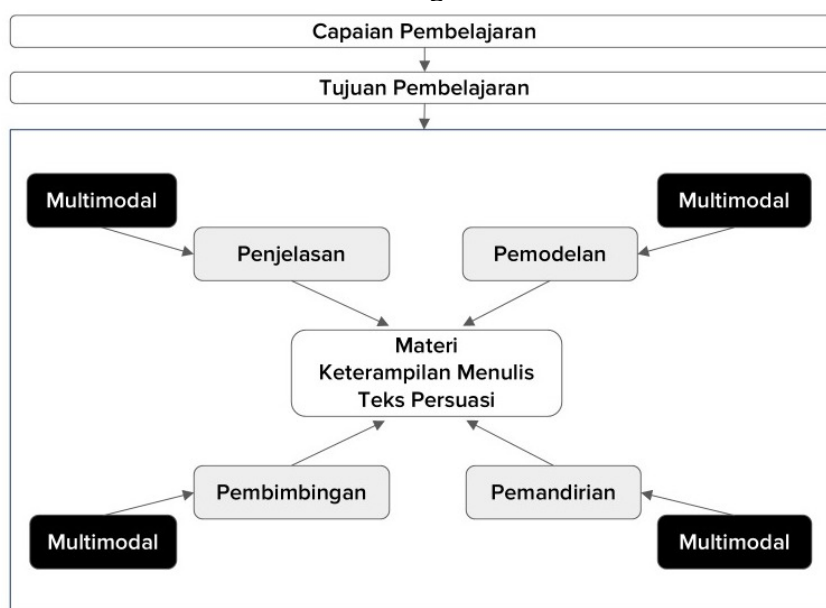
Design

At this stage, teaching materials are designed based on data from the needs analysis, with the goal of creating products that are not only curriculum-compliant but also engaging and effective. The design of these teaching materials fundamentally integrates two main theoretical approaches: the Genre-based Approach (GBA) and multimodal theory.

The teaching materials are systematically structured following the GBA cycle adapted from Derewianka (2003) and Kemendikbudristek (2023), which serves as a pedagogical framework to guide students in the writing process. Each stage is designed to apply GBA principles practically. The Explanation stage (Building Knowledge of the Field) introduces the concept and social function of persuasive texts in real life, in line with the Systemic Functional Linguistics (SFL) view that language is a context-bound system (Halliday & Matthiessen, 2014). The Modeling of the Text stage presents structured examples of persuasive texts, dissecting in detail how linguistic and visual

elements work together, in accordance with the Systemic-Functional Multimodal Discourse Analysis (SF-MDA) framework of O'Halloran (2008). The Guidance stage (Joint Construction of the Text) facilitates collaborative writing, while the Independent Construction of the Text stage encourages students to write independently, applying all the knowledge they have learned.

The media selection focused on digital-based multimodal formats to meet learner preferences and enhance learning effectiveness. This design is based on Mayer's (2021) Cognitive Theory of Multimedia Learning, which states that presenting information in verbal and visual formats simultaneously can enhance comprehension. Furthermore, this design adopts the principles of Kress & van Leeuwen (2006), who argue that each mode of communication has its own unique semiotic grammar and that meaning is formed through the interaction between these modes. Therefore, this teaching material strategically integrates elements of text, images, video, and animation not only for aesthetics, but also to optimize meaning formation, thus aligning with the concept of multimodal literacy (Jewitt, 2005). The advantage of this media design is that it facilitates understanding of linguistic structures and rules through concrete visualizations, while offering flexible access relevant to learners' daily lives.

Picture 1 Teaching Material Model

Based on the design process, the teaching materials model was developed based on learning objectives, learning strategies, media and format selection, and the structuring of the teaching materials. This resulted in a multimodal-based persuasive text writing skills teaching material model for genre-based learning. The following is the teaching materials model that will be used in the development phase. This model was developed based on material design and the selection of digital-based multimodal media. This persuasive text writing learning model in genre-based learning connects learning outcomes and objectives with a step-by-step process.

This model combines text, images, tables, and audio (video) and is structured through the stages of Explanation (characteristics of persuasive texts), Modeling (linguistic elements), Guidance (structure and design; collaborative writing), and Independence (independent writing steps), concluding with Assessment. The use of multimodal learning increases as needed at each stage, allowing students to progress

from understanding and analyzing examples to writing persuasive texts independently that align with the objectives, audience, and message.

Development

This stage is the realization of the design that has been prepared, where the teaching materials are developed into multimodal-based digital products. This process is based on learning scenarios that are guided by Learning Outcomes, Learning Objectives, and Learning Objective Flows to ensure curricular relevance. This product functionally operationalizes the Genre-based Approach (GBA) cycle rooted in Systemic Functional Linguistics (SFL) by Halliday & Matthiessen (2014), which views language as a system of meaning in a social context. This teaching material systematically guides learners through the stages of Explanation, Modeling, Guidance, and Independence, providing a structured and detailed framework.

Moreover, this product specifically embodies the principles of multimodal theory. In accordance with Mayer's (2021) Cognitive Theory of Multimedia Learning, which states that presenting information in verbal and visual formats simultaneously can enhance understanding, this teaching material strategically integrates text with images, videos, and audio. This integration is also supported by the theory of Kress & van Leeuwen (2006), who argue that meaning is formed through the interaction between modes. The use of multimodality is not only aimed at aesthetics, but also to optimize the formation of meaning, thus aligning with the concept of multimodal literacy (Jewitt, 2005). Overall, this development stage produced a draft teaching material that is a concrete combination of GBA and multimodality, which is conceptually tested and ready to proceed to the validation and implementation stages.

Following the development process, the teaching materials were reviewed by three experts. Their evaluations support the argument that the product integrates core theories not only conceptually, but also functionally, with each aspect of validation demonstrating the effective application of these principles.

The content and language and readability domains were assessed by two bahasa Indonesian lecturers from a state university, while the media and design domain was validated by a learning technology developer from the Ministry of Primary and Secondary Education.

Three experts evaluated content, language and readability, and media and design using Likert-type checklists.

Table 3
Expert Validation Result

Domain	Validation Aspect	Average Percentage	Criterion
Content	Content Quality	91.67%	Very Feasible
	Content Presentation	87.50%	Very Feasible
Language	Linguistic Quality	100%	Very Feasible
	Readability	100%	Very Feasible
Media	Ease of Use (Usability)	100%	Very Feasible
	Design	88.68%	Very Feasible
	Multimodality	80.00%	Feasible
Overall	Overall Average Score	92.76%	Very Feasible

As summarized in Table 1, all domain indices met the ≥70% feasibility criterion. Content quality (91.67%) and content presentation (87.50%) were very feasible. Language and readability each reached 100.00% (very feasible). Media aspects were very feasible for ease of use (100.00%) and design (88.68%), with multimodality at 80.00%

(feasible). The overall index was 92.76% (very feasible) per Akbar (2013).The following is a teaching material display predicated digital e-module. It has completed the rounds of validation and revision under the guidance of experts, making it ready for implementation.

Table 4
Teaching Material Display

Cover	Table of content	Learning Objective/Content Map

Material/Content	Multimodal Example	Assesment

Implementation

The implementation was carried out in one Grade VIII Indonesian language class at SMP Negeri 17 Depok (n = 39). The multimodal, genre-based module was taught through the complete Genre-Based Approach cycle: Building Knowledge of the Field, Modelling, Joint Construction, and Independent Construction. After instruction, students completed curriculum-aligned pretests and posttests (maximum score 16), and both teachers and students filled out user-response questionnaires. Feasibility scores were obtained using the formula (score obtained ÷ maximum score) × 100% and interpreted with the criteria from Akbar (2013). Learning progress was described through percentage gain and normalized gain (N-gain) with reference to Wahab (2021) and Hake (1999).

Table 5
Teacher Response

Respondent	Aspect	Average Percentage	Criterion
Teacher	learning-outcomes alignment	100	Very Feasible
	content	87.50	Very Feasible
	language	100	Very Feasible
	assessments	100	Very Feasible
	graphics & multimodality	91.75	Very Feasible
Overall	Overall Average Score	93.35	

Teacher responses averaged 93.35% (very feasible), with learning-outcomes alignment, language, and assessments each at 100%, graphics & multimodality 91.75%, and content 87.50% .

Table 6
Student Response

Students	Aspect	Average Percentage	Criterion
	content	79.75	Feasible
	assessments	82.75	Feasible
	graphics & multimodality	85.75	Very Feasible
overall	overall Average Score	82.75	Feasible

Student responses averaged 82.75% (feasible); by aspect: graphics & multimodality 85.75% (very feasible), assessments 82.75% (feasible), and content 79.75% (feasible).

Table 7
Pre-Post Test

Group	Score (%)	Difference (%)
Before (Pretest)	65.22	20.51
After (Posttest)	85.74	

The table shows a clear pre–post improvement: the class average rose from 65.22% on the pretest to 85.74% on the posttest, yielding a +20.51 percentage-point gain, which indicates substantive learning progress following implementation.

Evaluate

In the final evaluation phase, we examined the implementation of the developed teaching materials using teacher and student response indices alongside evidence of students' writing improvement. Teacher reported an overall index of 93.35%, classified as very feasible, while students' responses averaged 82.75%, classified as feasible. The degree of improvement in writing skills was quantified using the normalized gain (N-gain) for all 39 students who participated in the limited classroom trial.

Table 8
N Gain

N	Pretest	Postest	N-Gain	Effectiveness
39	65.22	85.74	0.61	61
Category			Medium	Moderate

The average N-gain score of 0.61, obtained from a limited trial involving 39 students, falls within the medium category, indicating a moderately effective learning impact (Wahab, 2021). This is further supported by an effectiveness index of 61%, which aligns with the classification. Collectively, these findings suggest that the multimodal, GBA-integrated teaching module is effective in improving persuasive writing performance among Grade VIII students, and does not require substantial revisions at this stage.

Discussion

This study aimed to develop and validate multimodal teaching materials that make the Genre-Based Approach (GBA) explicit for the teaching of persuasive writing at the junior secondary level. The findings show that this objective was achieved in terms of both product quality and learning outcomes. The e-module was validated by experts in the very

feasible category (92.76 %), the classroom teacher also rated it very feasible (93.35 %), and students rated it feasible (82.75 %), with the strongest appreciation directed at the visual and multimodal elements. When the module was implemented in a limited classroom trial involving 39 students, the class mean increased from 65.22 % to 85.74 %. This increase of 20.51 percentage points produced an average normalized gain of 0.61, which falls into the medium effectiveness category. Taken together, these results support the central claim of the study, namely that persuasive writing becomes more learnable and more attractive to students when explicit GBA staging is combined with a principled multimodal design.

The pattern of improvement is consistent with the theoretical framework. The module implemented the full GBA learning cycle, consisting of Building Knowledge of the Field, Modelling, Joint Construction, and Independent Construction. Previous work in Systemic Functional Linguistics has shown that such an explicit cycle helps students reduce the inferential load that usually occurs when they are asked to write on their own, because language choices are continuously tied to social purpose (Derewianka, 2003; Halliday and Matthiessen, 2014; Chen, 2021; Kemendikbudristek, 2023). In many classrooms students are instructed to make a poster or to write an advertisement, but they are not shown how the stages of persuasive discourse, for example attention, problem or need, offer, and call to action, are realized through lexicogrammatical resources. In contrast, the present module guided students to build topic knowledge first, to examine annotated exemplars, to construct texts together with the teacher, and only after that to attempt independent production. In such a sequence, a gain of 20.51 percentage points and an N gain of 0.61 are plausible and can reasonably be attributed to explicit genre pedagogy and not simply to the novelty of a digital material.

A second theoretical strand also aligns with the findings. The design of the module treated modes as coordinated semiotic systems. Verbal text, images, layout, icons, and colour were arranged so that they supported one another, in line with the principles of multimodal social semiotics (Kress and van Leeuwen, 2006; Jewitt, 2005) and the cognitive theory of multimedia learning which stresses coherence, signalling, and contiguity (Mayer, 2021). This is important because contemporary persuasion, particularly in social media and mobile based environments, is inherently multimodal and often operates through mass interpersonal persuasion effects (Fogg, 2008; Flanagin, 2017; Hudders and Lou, 2022; Peter, 2023; Stepaniuk and Jarosz, 2021; Weeks et al., 2015). If schooling continues to teach persuasive writing only as a monomodal, verbal task, it will not meet the communicative demands that students actually face. The medium N gain found in this study can therefore be read as the combined effect of two elements, namely GBA based scaffolding that makes rhetorical moves visible to learners, and multimodal orchestration that makes the function of each visual and layout choice transparent.

The user response data reinforce this interpretation. Teacher rated the module very highly in terms of curriculum alignment, clarity of language, and usefulness of assessment, which corresponds to established materials evaluation criteria and signals classroom readiness. Students indicated that they liked the graphics and multimodality most. This is in line with Indonesian classroom studies that report positive effects of interactive, digital, and mobile media on engagement and language learning (Hardiana, Risnawati, and Sa'adah, 2024; Amelia and Sukasih, 2025; Kara, 2024; Haas and Tussey, 2023; Drewry et al., 2020; Widiastuti et al., 2022). However, students gave a comparatively lower score to the content aspect, although it still fell in the feasible category. This result is consistent with the needs analysis in the Analyze phase, which

showed that for a group of learners the procedural steps for drafting persuasive texts were not yet sufficiently explicit. Expert validation showed a similar tendency, since the multimodality domain, although still feasible, received the lowest score among the expert rated aspects. These two signals point to the same conclusion. The issue is not that students dislike multimodal materials, but that the link between each mode and the step in the persuasive writing process needs to be made clearer. In other words, media must come together with explicit, stepwise guidance, for example captions that name the persuasive function, icons that map to types of appeal, and templates that already cue the staging of the genre. This is fully consistent with the coherence and signalling principles in multimedia learning, which warn against unnecessary cognitive load when the relationship among modes is not made explicit (Kress and van Leeuwen, 2006; Mayer, 2021).

Viewed within the broader Indonesian research and development context, this study extends current work in at least two ways. First, a large proportion of recent development studies in Bahasa Indonesia have been directed at other genres and other school levels, for example narrative writing modules built with Smart Apps Creator for elementary pupils, poetry modules, blended or hybrid materials for scientific article writing, and interactive tools for news writing (Amelia and Sukasih, 2025; Haslinda, 2024; Oktavia, Atmazaki, and Zaim, 2023; Hardiana et al., 2024). The present study instead focuses on persuasive texts for junior secondary students, particularly advertisements, slogans, and posters, which are explicitly listed as outcomes in the Kurikulum Merdeka for Phase D (BSKAP, 2024) and which teachers have reported as relatively under supported (Rahmawati et al., 2025). Second, recent scholarship has shown that the integration of SFL metalanguage with visual grammar can strengthen critical reading of multimodal texts (Emiliasari et al., 2025). This study translated that insight into a production oriented module that guides students to design multimodal persuasive texts, not only to analyse them. This shift from analysis to production represents a practical contribution, since it results in a classroom ready, replicable blueprint.

Several pedagogical implications can be drawn from these results. Teachers can maintain and extend learning gains by using annotated exemplars that make rhetorical moves visible, by providing micro-scaffolds such as claim–reason–evidence frames, sample warranting, and small banks of evaluative and affective lexis on topics relevant to adolescents, and by offering editing-friendly templates that already reflect the stages of the genre (Derewianka, 2003; Chen, 2021) so that students can focus on meaning rather than formatting. Designers and material developers can further refine the multimodal orchestration of the module (Kress & van Leeuwen, 2006; Jewitt, 2005) through the use of consistent signalling systems, for example captions that explicitly state persuasive function, simple iconography that corresponds to types of appeal, and layouts that keep text and image closely located in order to reduce extraneous cognitive load (Mayer, 2021). All of these strategies respond directly to the curriculum focus on advertising, slogans, and posters for Phase D (BSKAP, 2024), and to teacher needs in teaching digital advertisement texts (Rahmawati et al., 2025).

This research is not without limitations. This study was conducted with one intact class of 39 students and used descriptive analysis, so the findings should be interpreted as evidence of promise under these conditions rather than as final causal proof. The observed gain and N-gain indicate positive learning movement, but future studies with comparison or control groups could clarify the specific contribution of the module. In addition, the study did not include reliability coefficients for the response questionnaires or inter-rater agreement for the writing rubric; subsequent research can strengthen the

measurement aspect by adding those procedures. Given that students in this study showed a preference for digital and device based resources, later studies should also explore device specific affordances and accessibility features so that participation remains equitable (Widiastuti et al., 2022).

Making the Genre-Based Approach explicit (Derewianka, 2003; Chen, 2021) and embedding it within a carefully designed multimodal module (Kress & van Leeuwen, 2006; Mayer, 2021) can produce meaningful improvements in junior secondary persuasive writing. The module met feasibility standards, teacher accepted it strongly, students responded positively especially to the multimodal aspects, and the class showed a medium level of effectiveness as reflected in the N-gain. In a schooling context that is increasingly required to prepare learners to compose across text, image, audio, and video (Weeks et al., 2015; Jones & Hafner, 2022), and in a communication environment that is dominated by social media (Fogg, 2008; Flanagin, 2017; Peter, 2023), this study offers a curriculum-aligned (BSKAP, 2024) and empirically supported pathway for improving the teaching of persuasive writing.

Conclusion

This study achieved its aim of developing and validating multimodal teaching materials integrated with the Genre-Based Approach (GBA) for junior-secondary persuasive writing (advertisements, slogans, posters). Expert review indicated very high feasibility (overall 92.76%), teachers rated the module very feasible (93.35%), and students rated it feasible (82.75%). In a limited classroom trial (n = 39), the class average increased from 65.22% (pre-test) to 85.74% (post-test) with an average normalized gain of 0.61 (medium effectiveness). Taken together, these results show that explicitly staged GBA combined with principled multimodal orchestration can measurably strengthen students' persuasive writing while remaining acceptable to classroom stakeholders.

The product addresses the problem identified in the introduction: existing materials and classroom practices seldom operationalized the full GBA cycle or linked persuasive diction to visual design. The validated module fills this gap by providing curriculum-aligned resources that guide learners through Building Knowledge, Modelling, Joint Construction, and Independent Construction, while coordinating text, image, layout, and (where used) audio to support the same rhetorical purposes. This alignment with Kurikulum Merdeka Phase D outcomes, together with positive teacher and student responses, indicates strong contextual fit and classroom readiness.

For implementation, schools can adopt the module to meet Phase D targets and to better match learners' digital practices. Priority refinements include adding clearer step-by-step prompts for idea development and stance, expanding micro-scaffolds for argumentation and evaluative vocabulary, and strengthening intermodal signalling (concise captions, consistent iconography, and contiguity between text and visuals). The study is limited by its single-class, descriptive design and the absence of reported instrument and inter-rater reliability. Future research should incorporate comparison groups, establish reliability, examine retention and transfer to new topics and media, and test device-specific and accessibility features. Even with these limitations, the evidence supports adopting a GBA-integrated, multimodal approach as a feasible and educationally valuable pathway for improving persuasive-writing instruction at the junior-secondary level.

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