



Involving students in a collaborative and reflective reading material development: A participatory action research study

Elok Putri Nimasari,¹ Bambang Harmanto,¹ Rinjani Bonavidi,² Adi Fajaryanto Cobantoro,¹ Elvina Dwi Cahyani,¹ Velrinda Fahza'a Risty¹

¹Universitas Muhammadiyah Ponorogo, Indonesia, ²Keithcot Farm Children Centre Department for Education South Australia, Australia

Grounded in Halliday's Systemic Functional Linguistics and Freire's Critical Pedagogy, this participatory action research aims to develop a transformative digital reading assessment model that embeds cultural values and promotes critical literacy. Conducted over four months at an Islamic-Muhammadiyah higher education institution in Indonesia, this study involved 30 student participants and several community figures. Data were collected through classroom observations, focus group discussions, and interviews, and analyzed using critical discourse analysis informed by SFL's meta functions and Freirean principles. Findings reveal three key themes: (1) students interpreted texts as ideological constructs by identifying field, tenor, and mode; (2) students co-constructed culturally situated reading materials through dialogic engagement with community members; and (3), students critically engaged with multimodal digital texts by analyzing how visual and linguistic elements shaped meaning. This study offers a practically grounded model for reading assessment, showing how digital platforms can serve as ethical spaces for language learning that is both critical and culturally embedded.

Keywords: critical pedagogy, digital reading assessment, cultural values, systemic functional linguistics

OPEN ACCESS

ISSN 2503 3492 (online)

*Correspondence:

Elok Putri Nimasari
nimasari@umpo.ac.id

Received: 16th June 2025

Accepted: 14th August 2025

Published: 8th October 2025

Citation:

Nimasari, E.P., Harmanto, B., Bonavidi, R., Cobantoro, A.F., Cahyani, E.D., Risty, V.F. (2025). *Involving students in a collaborative and reflective reading material development: A participatory action research study*. *JEES (Journal of English Educators Society)*, 10(2). <https://doi.org/10.21070/jees.v10i2.1948>

INTRODUCTION

Reading assessment in English for Specific Purposes (ESP) has predominantly focused on cognitive processing models and standardized testing approaches, often overlooking the socio-cultural and ideological dimensions of language embedded in reading texts (Basturkmen, 2022; Hyland, 2019). Michael Halliday's Systemic Functional Linguistics (SFL), however, provides a powerful framework for examining how texts function as social semiotic resources that both shape and are shaped by discourse communities (Halliday & Matthiessen, 2014). SFL posits that texts operate within three interrelated dimensions of meaning: field (the subject matter and its social significance), tenor (the relationships and power dynamics between language users), and mode (the channel of communication and its degree of formality). These dimensions are crucial for contextualizing reading assessment, particularly when embedding specific ideological and cultural values, such as Muhammadiyah values, into digital learning environments in higher education.

Despite the growing body of literature in ESP and digital learning, studies integrating Halliday's SFL into reading assessment remain limited (Dreyfus et al., 2021; Ryshina-Pankova & McKnight, 2022). More specifically, little is known about how reading comprehension materials in digital learning environments can be structured to embed Islamic cultural values while ensuring that texts remain functionally meaningful and contextually relevant.

Traditional reading assessments tend to prioritize linguistic accuracy and comprehension strategies, yet they often overlook how texts construct social identities and ideological positions (Martin & Rose, 2022). Addressing this gap, an SFL-informed approach to reading assessment in higher education can strengthen instructional materials by aligning textual construction with the cultural values and ideological orientations central to Islamic, particularly Muhammadiyah, educational philosophy. Muhammadiyah, one of the largest Islamic organizations in Indonesia, was founded in 1912, with a mission that emphasizes education, social welfare, and the promotion of progressive Islamic thought. Its values emphasize modernity, rationality, and ethics rooted in Islamic teachings, all of which play a significant role in shaping the educational philosophy of Muhammadiyah institutions (Wijayati & Khafidhoh, 2023).

Recent studies have explored the application of SFL in language education, particularly in writing assessment (Derewianka & Jones, 2020; Moradian et al., 2021) and classroom discourse analysis (Fang & Schleppegrell, 2020; Jackson, 2021). In contrast, research on ESP reading has been slower to adopt SFL as a core analytical tool. Studies by Maton and Doran (2021), Mochizuki and Starfield (2021), and Morton (2023) highlight the role of semantic waves in structuring academic texts, while Hyland (2021) and Leezenberg (2002) discuss disciplinary variation in language choices. However, these works focus primarily on academic writing rather than reading assessment. Furthermore, digital learning environments have increasingly incorporated corpus linguistics and automated assessment tools (Alaqlobi et al., 2024; Godwin-Jones, 2020; Van Der Vegt et al., 2023), yet these approaches often overlook the social and functional dimensions of language use (Ando, 2021; Delahunty et al., 2014). Although digital platforms now offer interactive and multimodal reading materials (Al-Mahrooqi & Denman, 2022; Nimasari et al., 2023; Silseth & Gilje, 2019; Weinmann et al., 2024), there remains limited research on how such materials can be critically designed to embed specific cultural values and foster ideological literacy through language choices aligned with SFL principles.

The core issue in current reading assessment practices for ESP lies in their neglect of the social and ideological functions of texts. Traditional assessments tend to emphasize lexical and grammatical accuracy while overlooking how meaning is constructed in relation to the social purposes of communication (Halliday & Matthiessen, 2014). Although existing approaches, such as genre-based pedagogies (Hyland, 2021) and discourse-based assessments (Danis, 2022), offer valuable insights, they seldom address the ideological dimensions of reading texts, particularly within religious and cultural education contexts like Muhammadiyah higher education institutions. This gap is especially significant in the context of Indonesian higher education, where cultural values shape students' perspectives, ideological literacy fosters critical awareness of belief systems, and critical literacy empowers learners to question, analyze, and transform texts. Addressing this intersection of language, ideology, and culture is therefore essential for developing more socially responsive and contextually grounded reading assessment models.

A growing body of research suggests that embedding cultural and ideological values in reading materials can enhance learner engagement and foster critical literacy (Li et al., 2023; Luke & Freebody, 2021; Li et al., 2024; Zhang & Wang, 2024). However, few studies have examined how these values can be explicitly incorporated into digital reading texts through the use of SFL as both an analytical and pedagogical framework. Integrating Muhammadiyah cultural values into digital reading assessments requires a systematic approach to field (content relevance), tenor (ideological positioning), and mode (digital affordances and multimodal communication). Moreover, integrating critical pedagogy, particularly as conceptualized by Freire (1970), can strengthen this framework by ensuring that reading assessments move beyond measuring language proficiency to fostering critical engagement with texts and ideological structures they convey (Corbett & Guilherme, 2021). Critical pedagogy promotes critical consciousness, enabling students to reflect on and challenge dominant narratives in reading materials.

This study seeks to address this gap by developing and accessing reading materials that embed Muhammadiyah values within an SFL framework, thereby offering a model for contextually enriched digital reading assessments in higher education. Specifically, it examines how students engage in a collaborative and reflective reading material development using Halliday's field, tenor, and mode framework while integrating Freire's critical pedagogy with its emphasis on student agency and critical consciousness.

The novelty of this research lies in its interdisciplinary approach, combining SFL (Halliday & Matthiessen, 2014) and critical pedagogy (Freire, 1970; Corbett & Guilherme, 2021; Freire & Macedo, 2014) to advance ESP reading assessment. By incorporating Halliday's linguistic theory (Halliday & Matthiessen, 2014; Pakir, 2019) into digital learning materials and fostering critical engagement with texts, this study offers a perspective on reading assessment that is both linguistically rigorous and socially transformative. This research contributes empirically by providing evidence-based insights into how SFL and critical pedagogy can be operationalized in ESP reading assessment. Practically, it offers educators in Muhammadiyah institutions a structured framework for embedding ideological values in digital reading materials, thereby promoting a more holistic and contextually responsive approach to language education.

Gaps from Previous Studies

In recent years, numerous studies have applied SFL in language education, particularly in discourse analysis, literacy development, and pedagogical interventions. However, substantial gaps remain in the integration of SFL into reading assessment, especially in embedding ideological and cultural values, such as Muhammadiyah principles, within digital learning frameworks. This review critically examines relevant studies from Scopus-indexed journals, summarizing their aims, methodologies, and key findings to identify research gaps that establish the novelty of the present study.

Ryshina-Pankova et al. (2021) provided a comprehensive overview of SFL as a framework for analyzing multilingual and multimodal discourse. Their study focused on the ideational, interpersonal, and textual meta functions in

multilingual literacy education, highlighting how SFL enables learners to navigate academic texts effectively. Using qualitative discourse analysis, the study examined instructional strategies aligned with SFL principles. While the findings affirmed SFL's value as a powerful analytical tool in multilingual classrooms, the research did not extend its application to reading assessments or the embedding of ideological content within texts. Thus, although it provided important pedagogical insights, it lacked empirical data on assessment methodologies that integrate ideological values, a gap this study aims to address.

[Danis \(2022\)](#) and [Thomas \(2022\)](#) examined writing assessment through the lens of SFL, emphasizing that meaning making should be a central to language testing. Using corpus linguistics to analyze student writing samples, their studies demonstrated how textual choices reflect social positioning and disciplinary knowledge. However, their scope was confined to writing rather than reading assessments, leaving unexplored how SFL can be applied to evaluate comprehension skills in digital learning environments. Moreover, neither study address the influence of ideological and cultural values on reading comprehension, underscoring the need for further research in this area.

[Suwannasom and Pattanajak \(2023\)](#) investigated the role of digital learning ecosystems in higher education, focusing on classroom teaching methodologies in Thailand. Their mixed-method study identified key components of digital learning environments, including interactive learning materials, instructional support, and collaborative platforms. While offering a detailed analysis of digital pedagogy, the study did not consider the linguistic structuring of reading materials through an SFL framework. Additionally, it overlooked how ideological values could be systematically embedded in digital texts, leaving an unexplored intersection between digital learning, linguistic theory, and ideological content.

[Morton \(2023\)](#) explored instructional design in higher education through an SFL lens, emphasizing the alignment of learning outcomes with genre-based pedagogy. Using action research methods, this study developed instructional frameworks grounded in genre theory and SFL principles. While the findings supported the effectiveness of SFL in structuring instructional design, the research did not extend to digital reading assessments or the integration of cultural and ideological values. This limitation indicates a gap in research that explicitly examines how SFL-informed reading materials can be developed to reinforce cultural identity and ideological perspectives within digital learning platforms.

A broader review by [Alaqlobi et al. \(2024\)](#) and [Al-Mahrooqi and Denman \(2022\)](#) assessed the strategic integration of artificial intelligence in higher education, emphasizing how AI-driven digital tools enhance learning experiences. While both studies acknowledged the potential of technology for personalized learning and assessment, they lacked a linguistic focus and did not incorporate SFL in their analysis of digital texts. Additionally, they did not explore how digital reading assessments could be designed to embed specific cultural or ideological narratives, another gap this study seeks to address.

Despite the valuable contributions of these studies to language education, several critical gaps remain unaddressed. First, none explicitly examined reading assessments from an SFL perspective, particularly in relation to embedding ideological values in digital learning materials. While some research explored genre-based pedagogies and digital learning ecosystems, they did not consider how Muhammadiyah cultural values could be systematically integrated into reading texts through the dimensions of field, tenor, and mode. Additionally, prior studies have predominantly focused on writing or general literacy education, leaving reading comprehension assessment as an underexplored area in SFL-based research.

Another critical gap is the lack of empirical studies at the intersection of digital learning, ideological content, and functional grammar ([Danis, 2022](#); [Godwin-Jones, 2020](#)). Although research has examined digital learning platforms or linguistic theory separately, there remains a significant void in studies that integrate these aspects to enhance ESP reading assessment. Moreover, existing studies have not proposed practical, empirically tested frameworks for developing and accessing digital reading materials that incorporate ideological and cultural dimensions.

To answer these gaps, this study proposes a novel approach to reading assessment that integrates SFL principles with Muhammadiyah cultural values in digital learning environments. By analyzing and designing reading materials through Halliday's dimensions of field, tenor, and mode, this study aims to develop an assessment framework that not only evaluates comprehension skills but also fosters ideological engagement. This interdisciplinary approach bridges linguistic theory, digital pedagogy, and cultural education, offering a comprehensive model for ESP reading assessment in higher education. The study will contribute to the literature by providing empirical evidence on how digital reading assessments can be purposefully designed to embed cultural values, promote critical awareness, and enhance learning outcomes.

Theoretical framework

Halliday's systemic functional linguistics (SFL) offers a robust theoretical foundation for developing reading assessment frameworks that move beyond traditional emphases linguistic accuracy and cognitive processing. As a social semiotic system, SFL views language as a resource for meaning making within specific social and ideological contexts ([Halliday & Matthiessen, 2014](#); [Pakir, 2019](#)). This study applies SFL's three meta-functions, ideational, interpersonal, and textual, to the development of reading texts and assessments, ensuring that materials are both comprehensible and contextually meaningful.

To enhance the socio-critical dimension, SFL is integrated with [Freire \(1970\)](#) critical pedagogy ([Corbett & Guilherme, 2021](#)), which positions education as a means of social transformation and promotes critical consciousness through questioning dominant discourses. The ideational meta-function supports the analysis of how texts represent social reality, while critical pedagogy ensures that students interrogate the ideological structures underpinning these representations. The interpersonal meta-function aligns with

Freire’s dialogic learning, fostering co-construction of knowledge between educators and students. Using participatory action research (PAR), this study incorporates student perspectives into digital reading assessment design to promote inclusivity and agency. Finally, the textual meta-function ensures coherence and cohesion in digital reading texts, while critical pedagogy frames literacy as a tool for empowerment. Digital platforms will be designed to encourage active, multimodal engagement, enhancing both linguistic proficiency and critical literacy.

By integrating SFL with critical pedagogy, this study proposes a transformative reading assessment framework that not only evaluates linguistic proficiency but also fosters ideological awareness and critical thinking in digital learning environments. SFL offers a systematic approach to analyzing language in context, while critical pedagogy offers a means to interrogate the power relations and ideological positions embedded within reading texts (Freire, 1970; Corbett & Guilherme, 2021; Freire & Macedo, 2014). This integration ensures that digital learning environments do not merely provide linguistic input but also engage students in an active process of meaning-making and critical reflection.

In the participatory action research (PAR) design, learners are positioned as active agents in the learning process rather than passive recipients of knowledge (Leavy, 2023). Freire’s concept of dialogic learning is operationalized through student involvement in the assessment process, allowing them to reflect on their understanding of texts and their ideological implications (Corbett & Guilherme, 2021; Freire & Macedo, 2014). This approach moves reading assessments beyond static comprehension questions, fostering deeper engagement with language as a tool for social and ideological critique.

Furthermore, digital multimodal texts expand the possibilities for applying SFL and critical pedagogy in reading assessment. Texts in digital learning environments extend beyond linear print to include images, hyperlinks, videos, and interactive elements. These multimodal resources enable students to engage with multiple layers of meaning (Nadia et al., 2021), reinforcing SFL’s textual meta-function while simultaneously fostering critical engagement with digital literacy practices (Ryshina-Pankova et al., 2021). Through this framework, reading assessments can challenge students to recognize how meaning is shaped not only by linguistic structures but also by multimodal affordances. This study aims to bridge the gap between functional linguistics and socio-critical approaches, offering a holistic and participatory model for developing reading assessments that reflect both language and ideology. By embedding Islamic-

Muhammadiyah cultural values into digital reading texts through the combined application of SFL and critical pedagogy, this research contributes to the growing discourse on integrating ideological and cultural perspectives in higher education reading assessment.

METHODS

Research Context and Participants

Grounded in social-constructivism research paradigm (Leavy, 2023; Pass, 2007), this four-month participatory action research project was conducted at an Islamic-Muhammadiyah higher education institution in East Java, Indonesia. The study explored digital learning environments to develop reading materials that embed Islamic values. Of the 54 eligible students, 30 were invited to participate voluntarily, selected based on their interest in creating culturally embedded reading materials and their willingness to engage in reflective, dialogic classroom activities. Before selection, all students received a detailed briefing on the project’s objectives, expectations, and time commitments. Those who provided informed consent joined the PAR process as a co-researcher. No participants were assigned; involvement was entirely voluntary to ensure authentic engagement and alignment with the emancipatory aims of Freirean pedagogy.

The researchers assumed on multiple roles in this study, serving both as lecturers to the student participants and as observers of the material development process. Alongside the students, five community figures, two from Muhammadiyah and three from Aisiyiyah, participated as research collaborators. These individuals were purposively selected for their extensive historical and ideological knowledge of Muhammadiyah and Aisiyiyah values, as well as their active engagement in local cultural education. Their contributions included co-developing content, providing historical artifacts, and participating in iterative discussions with both students and researchers. Data were collected through observations and discussions with all participants. Initial meetings were conducted to obtain informed consent and clarify participant roles in the project. The researchers met with the Muhammadiyah and Aisiyiyah collaborators on five occasions to collect and analyze historical data. Meanwhile, the student participants attended six reading comprehension classes, where they engaged in critical reading activities based on the texts under study.

TABLE 1 | Summary of PAR stages, timeline, and participant roles

PAR’s stages	Timeline	Researcher Roles	Student Roles
Stage 1: Orientation and Planning	Week 1–2	Provided demonstrations; introduced the SFL and Freirean frameworks; obtained informed consent.	Participated in orientation; selected topics for reading; discussed the relevance of texts.
Stage 2: material collection	Week 3–5	Facilitated meetings with Muhammadiyah/Aisiyiyah figures; observed interactions.	Conducted interviews with community figures; gathered historical materials.

Stage 3: collaborative analysis	Week 6–8	Guided group discussions; observed student interactions and interpretations.	Analyzed texts using the SFL framework; interpreted ideological content; co-constructed texts.
Stage 4: Reflection and Revision	Week 9–12	Conducted focus groups and interviews; documented student reflections.	Reflected on engagement; revised materials; developed digital reading tasks.

As the project progressed, student participants were given the autonomy to select their own reading topics through structured group discussions. To ensure authenticity and contextual relevance, they engaged directly with Muhammadiyah and Aisyiyah figures, gathering primary sources and historical artifacts. The collected materials were then brought back to the classroom for peer discussions, where students collaboratively analyzed the texts. This extensive reading activity enabled them to engage more deeply with the content and construct meaning that was both personally and academically significant.

Throughout the project, students were encouraged to self-monitor their reading progress on a weekly basis. This reflective practice allowed them to track their own development, assess comprehension and analytical skills, and adjust reading strategies accordingly. Consistent self-monitoring fostered greater autonomy, heightening students' awareness of their learning processes and the progression of their reading abilities over time.

Data Collection and Analysis

This PAR was conducted in an ESP class at an Islamic-Muhammadiyah higher education institution in Indonesia, engaging 30 eligible students as co-researchers. Data were gathered from multiple sources to enable triangulation and gain a deeper understanding of participants' involvement in the collaborative and reflective development of reading material. These sources included participant observations, focus group discussions, and semi-structured interviews.

Research Procedures

At the outset of the PAR project, the first author, who also served as lecturer and research collaborator, provided demonstrations to guide students in selecting appropriate reading texts (see [Table 1](#)). Students were introduced to text analysis through the lens of Systemic Functional Linguistics (SFL) and critical pedagogy, enabling them to explore how language functions within a social context. Particular emphasis was placed on identifying socio-cultural values and underlying messages embedded in texts. This stage established a foundational framework for students to critically engage with reading materials and recognize how texts convey meaning beyond their surface content.

Throughout the intervention, the first author, acting as a teacher-researcher, closely observed classroom interactions, group work, and student engagement. These participant observations captured the dynamics of collaborative text-making as well as moments of reflective dialogue and critical questioning. Focus group discussions were conducted with two different sets of stakeholders. The first involved ongoing discussions between the researcher and students, focusing on how reading materials were jointly developed, reflected upon, and revised. These sessions served as dialogic spaces in

which students could articulate understandings, negotiate meaning, and raise critical inquiries into texts and contexts. The second set of focus groups included key community figures affiliated with Muhammadiyah and Aisyiyah, contributing broader cultural and ideological contextualization to the materials under development.

Additionally, semi-structured interviews were conducted with Muhammadiyah and Aisyiyah figures to explore how Islamic pedagogical values could inform – or challenge – the textual and discursive features of the collaboratively produced materials. These conversations offered critical insights into how ideological stances influenced students' engagement and decision-making during the material development process. All interactions, including classroom observations, focus groups, and interviews – were audio-recorded and transcribed verbatim. The resulting transcripts constituted the primary corpus of qualitative data, which was analyzed through critical discourse analysis informed by Halliday's SFL and Paulo Freire's critical pedagogy (see [Table 2](#)).

From an SFL perspective, the transcribed texts were analyzed with attention to the ideational meta-function (what is represented), the interpersonal meta-function (how relationships are enacted), and the textual meta-functions (how texts are organized). This analytical lens enabled the researcher to examine how meanings were constructed and negotiated within the texts co-authored by students, and how linguistic choices either reinforced or resisted dominant discourses. Concurrently, the principles of Freirean critical pedagogy were applied to interrogate how students engaged with texts as active subjects of their own learning. Particular attention was directed to moments in which students challenged taken-for-granted assumptions, questioned power relations embedded within texts, and collectively re-authored materials to more accurately reflect their social realities.

Through iterative cycles of coding, categorization, and interpretation, emergent themes were identified. These themes captured the progression of students from passive recipients of textual knowledge to critical co-creators of culturally resonant and pedagogically meaningful texts (see [Table 2](#)). The integration of SFL and critical pedagogy in the analysis provided a dual lens: one structural and linguistic, the other ideological and transformative. Credibility was strengthened through methodological triangulation across observations, focus groups, and interviews, as well as through member checking with participants to validate emerging interpretations. To mitigate potential bias, the researcher maintained reflexive field notes and engaged in peer debriefing. Given the ideological sensitivity of the content, the researcher's positionality as both facilitator and co-participant was critically examined to ensure transparency and analytic rigor.

TABLE 2 | Thematic coding analysis from Hallidayan and Freirean theories

Theoretical framework	Main themes	Sub-themes	Illustrative analysis examples
Hallidayan Systemic Functional Linguistics (SFL)	Interpreting texts as ideological constructs through SFL	<ul style="list-style-type: none"> Ideational meta-function (field) Interpersonal meta-function (tenor) Textual meta-function (mode) 	<ul style="list-style-type: none"> Identifying value-laden language (e.g., “KH. Ahmad Dahlan established...”) Recognizing authoritative tone and relational distance Analyzing chronological sequencing to frame professionalism and vision
Freirean Critical Pedagogy (dialogue, conscientization) and Hallidayan SFL (structuring text via field, tenor, mode)	Dialogic co-construction of culturally situated materials	<ul style="list-style-type: none"> Collaboration with community figures Reflective selection of topics Ideological negotiation in text development 	<ul style="list-style-type: none"> Inclusion of gender perspectives (e.g., Text 3: Aisyiyah) Emphasis on social justice (e.g., Al-Ma’un and economic empowerment) Students designing questions targeting field, tenor, and mode
Hallidayan SFL (textual/meta-functional analysis of multimodality) and Freirean Critical Pedagogy (critical questioning, ideological critique)	Critical engagement with digital and multimodal texts	<ul style="list-style-type: none"> Multimodal text analysis Ideological interpretation of visual/linguistic synergy Student-created digital reading tasks 	<ul style="list-style-type: none"> Analyzing visual-textual alignment (e.g., image placement & hyperlinks) Evaluating ideological implications in Qur’anic verse sequencing Designing comprehension tasks addressing digital mode and layout choices

RESULTS AND DISCUSSION

Based on selective data analysis from classroom observations, student focus group discussions, and interviews with Muhammadiyah and Aisyiyah figures, three central themes emerged, reflecting the theoretical integration of Halliday’s SFL (Halliday & Matthiessen, 2014; Pakir, 2019) and Freire’s critical pedagogy (Corbett & Guilherme, 2021; Freire, 1970; Freire & Macedo, 2014). These themes demonstrate how students, positioned as both co-authors and critical readers, actively engaged in developing ideologically enriched reading materials within digital learning environments. The three themes are: (1) interpreting texts as ideological constructs through SFL; (2) dialogic co-construction of culturally situated materials; and (3) critical engagement with digital and multimodal texts.

Interpreting Texts as Ideological Constructs through SFL

Students developed critical awareness of how language functions to represent, position, and structure social reality. Through the lens of SFL’s ideational, interpersonal, and textual meta-functions, they analyzed reading texts to uncover how meaning is shaped by field (what is being discussed), tenor (who is involved and in what relationship), and mode (how the message is delivered). This theme highlights how the reading assessment process extended beyond the mere decoding of information to a deeper interrogation of whose values and ideologies were embedded within the text. Students’ ability to both recognize, and re-author texts reflects SFL’s effectiveness as a meaning-making

model and its potential for fostering ideological literacy (Gebhard & Accurso, 2022; Martin & Rose, 2022; Morton, 2023).

Classroom engagement with Text 1: The Founding of Muhammadiyah offers a clear example of how students deconstructed ideational meaning. They discussed how the text frames KH. Ahmad Dahlan’s establishment of Muhammadiyah as both a religious and revolutionary act. Several participants pointed out the recurrent use of material and relational processes, such as “KH. Ahmad Dahlan established the school...” and “Muhammadiyah was officially recognized...”, which serve to convey purposeful agency and institutional legitimacy rooted in Islamic reform. In a focus group session, the students stated:

“When the text says, ‘He relied on his own wealth to realize his vision of a modern Islamic educational institution,’ I think it tries to show KH. Ahmad Dahlan not only as a religious figure, but also as someone modern, rational, and generous. It’s not just telling history but promoting Muhammadiyah’s values.” (Student focus group transcript, FG1)

“I realized that the phrase ‘Muhammadiyah was officially recognized’ isn’t neutral, it makes it sound formal and state-approved, which adds to its legitimacy.” (Student FGD, FG2)

“This sentence, ‘with the hope that its members would follow the example,’ sounds like it’s talking down to the reader a bit. It makes us feel like followers, not participants.” (Student discussion, Session 3)

“Why not say, ‘They worked together to build schools’? It would sound more collective than just saying ‘KH. Ahmad Dahlan established...’” (Classroom reflection, Session 2)

These students’ excerpts reflect their understanding of the field dimension of SFL (what is being represented) and how it aligns with Muhammadiyah’s ideology of Islamic modernism and social reform. In another observation, students noticed how the tenor of the text, marked by respectful references to KH. Ahmad Dahlan and the use of a collective narrative voice (“with the hope that its members would follow the example...”), served to reinforce the organization’s authority and moral appeal. Additionally, the textual meta-function emerged in students’ analysis of the text’s chronological sequencing, from its founding to its expansion, which they interpreted as not merely informative but also persuasive in positioning Muhammadiyah’s growth as a logical and inevitable progression. One student remarked:

“The structure makes Muhammadiyah look organized and forward thinking. It helps us see that it’s not only spiritual but also professional.” (Student observation note, Session 3)

Interview with Muhammadiyah and Aisiyiah figures revealed a strong consensus on the importance of including The Founding of Muhammadiyah as a foundational reading text. One Muhammadiyah elder explained:

“Our young generation must understand that Muhammadiyah was born from struggle and vision. It’s not just a name. If they know the history, they will realize why values like education, rationality, and social welfare matter. This is essential for shaping them as agents of change.” (Interview, Muhammadiyah representative, IM1)

Another Aisiyiah figure emphasized that embedding this text helps bridge identity and purpose:

“Reading about Ahmad Dahlan’s efforts helps students connect personally with our mission. They need to see that they are continuing a legacy, not just reading for a test.” (Interview, Aisiyiah leader, IA2)

These findings validate the decision to foreground The Founding of Muhammadiyah within the assessment model and illustrate how history operates ideologically through SFL’s field (subject relevance), tenor (relationship-building), and mode (chronological, formal presentation). The text’s cultural relevance not only increased student engagement but also reinforced their role as moral and intellectual inheritors of Muhammadiyah’s vision. (see [Figure 1](#))

While prior research by [Ariyanti \(2023\)](#) and [Nimasari, et al. \(2024\)](#) has examined the application of SFL in writing assessment and instructional design, limited attention has been given to its use in reading assessment or the integration of ideological values into digital learning materials. The distinctiveness of this study lies in its shift from grammar-focused comprehension toward a meaning-making approach that synthesizes SFL with [Freire’s \(1970\)](#) principles of critical pedagogy ([Corbett & Guilherme, 2021](#)). In contrast to automated or corpus-based reading tasks ([Godwin-Jones, 2020](#)), the student-led analyses in this project were both context-aware and culturally embedded.

Compared to earlier studies that treat functional linguistics and ideological critique as separate domains, this

research demonstrates that SFL can serve as a powerful analytical framework for revealing how reading texts function as vehicles for ideological formation. By explicitly embedding Muhammadiyah cultural values into the dimensions of field, tenor, and mode, and by equipping students to analyze them, the study advances critical literacy while situating it within a local Islamic framework. Moreover, the integration of student voice and agency aligns with Freire’s vision of learners as active participants in the construction of knowledge. The transformative shift was evident when students moved beyond asking, “What is this text about?” to posing questions such as “Whose perspective is this?” and “What values are being promoted?”

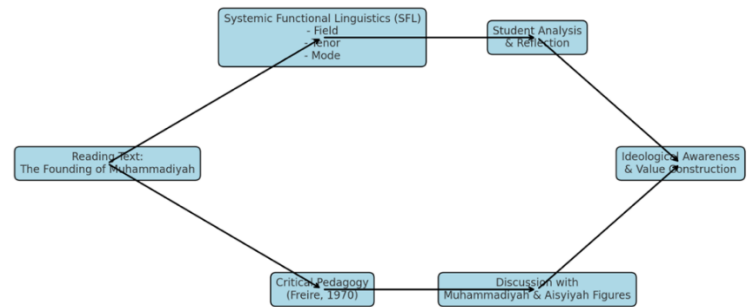


FIGURE 1 | Visual Model: Interpreting Texts as Ideological Constructs through SFL

Dialogic Co-Construction of Culturally Situated Materials

Aligned with Freire’s emphasis on dialogic learning, this theme demonstrates how students and community figures collaboratively developed reading materials that embodied Islamic and Muhammadiyah cultural values. Rather than relying on pre-designed resources, students actively gathered, analyzed, and curated materials drawn from authentic artifacts and local narratives. These iterative cycles of negotiation allowed for the integration of SFL-informed linguistic structuring with ideological reflexivity, transforming the classroom into a participatory site of cultural production ([Luke & Freebody, 2021](#); [Nimasari et al, 2024](#); [Li et al., 2024](#)). In this process, learners were positioned as producers of knowledge rather than passive recipients, reflecting Freire’s vision of education as a liberatory practice.

During collaborative discussions and material development stages, students engaged directly with Muhammadiyah and Aisiyiah figures to curate texts of historical, ideological, and cultural significance. One of the clearest examples of this co-construction process emerged in the selection and development of Text 3: Aisiyiah. Initially, many students overlooked this text in favor of more prominent figures and events. However, following a dialogue with an Aisiyiah leader, the importance of its inclusion became evident. The leader explained:

“Aisiyiah has been shaping Islamic education for women long before many of us were born. If students only read about male figures, how will they understand the gender values Muhammadiyah stands for?” (Interview, IA3)

In response, students collaboratively drafted comprehension questions, discussion prompts, and sentence completion tasks centered on the Aisiyiah narrative,

reflecting their growing understanding of gender representation and ideological discourse. This process aligns with Freire's concept of "conscientization", the development of critical awareness through reflection and dialogue (Freire, 1970). Another powerful example emerges from Text 4: Muhammadiyah Economic Movement, which was developed at the request of a Muhammadiyah figure who urged:

"Economic empowerment is part of our da'wah. Students need to read about Al-Ma'un not just as charity, but as a call to change society structurally." (Focus group discussion, Muhammadiyah leader, FG-M1)

This insight prompted students to revise the original draft to emphasize ideational elements related to collective economic action and social justice. They incorporated questions addressing the field (economic responsibility), tenor (Islamic moral authority), and mode (informational sequencing), thereby reinforcing all three meta-functions of SFL. An excerpt from a classroom transcript illustrates this co-construction in practice:

Student A : *"Why do we think Aisyiyah is less represented in textbooks?"*

Student B : *"Maybe because people think it's just a women's group, but actually it started formal schooling for girls, right?"*

Student C : *"Yeah, and Nyai Ahmad Dahlan was also a founder, why don't we highlight that?"*

(Classroom transcript, Session 4)

"We only see men in our textbook stories. But what about Nyai Ahmad Dahlan? Why didn't we include her in the reading? She's as important." (Student comment, Session 4)

This transcription from classroom discussion session 4 demonstrates how students critically evaluated dominant narratives and restructured content to challenge gender marginalization in institutional history, aligning with SFL's interpersonal function and Freirean dialogic pedagogy. Previous research, such as Zhang and Wang (2024) and Suwannasom and Pattanajak (2023), has emphasized the utility of SFL for instructional design and digital materials. However, these studies rarely position students as co-developers of materials, nor do they involve community figures in validating or enriching ideological content. The integration of community-based dialogue into ESP materials therefore represents an innovation that has not yet been sufficiently emphasized in the current literature.

The dialogic material development process identified in these findings contributes to the field in several keyways. It operationalizes critical pedagogy and SFL not only in text analysis, but also in authorship and curriculum design. It fosters learner autonomy, critical thinking, and engagement with authentic sociocultural knowledge. It bridges formal academic literacy with community knowledge, thereby enhancing content relevance and ideological depth. Unlike previous ESP assessments that focus on abstract or generic topics, the texts produced in this study, such as Aisyiyah, Buya Hamka, and The Muhammadiyah Economic Movement, are imbued with values, histories, and ideologies that reflect students' identities and social contexts.

Furthermore, these findings demonstrate that dialogic co-construction allowed students to act as cultural agents and ethical authors. They did not merely complete a prescribed learning task; rather, they participated in shaping educational discourse, transforming the classroom into a site for social change, fully aligned with Freire's (1970) pedagogical vision and Halliday's conception of language as a social semiotic (Jackson, 2021).

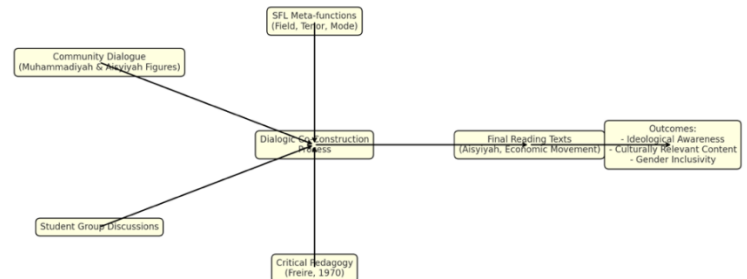


FIGURE 2 | Visual Model: Dialogic Co-Construction of Culturally Situated Materials

Critical Engagement with Digital and Multimodal Texts

Students' engagement with digital reading materials revealed how multimodal resources, such as images, hyperlinks, timelines, embedded media, interact with linguistic choices to shape meaning. Using the SFL framework, students learned to analyze how textual and visual modes complement one another in construing field, tenor, and mode. Freirean critical pedagogy further supported this analytical process by prompting students to interrogate not only what is represented, but also what is omitted, distorted, or silenced. This theme illustrates the potential of digital learning environments to support critical literacy practices that are both language-oriented and socially grounded (Fang & Schleppegrell, 2020; Al-Mahrooqi & Denman, 2022).

Digital multimodal texts such as Text 2: Buya Hamka and Text 5: Muhammadiyah's Stance on Interfaith Relations offered students opportunities to interpret meaning across linguistic and non-linguistic modes. They examined how embedded hyperlinks, thematic visuals, and text layout influenced their understanding of narrative tone and ideological positioning. For example, one group examined the following sentence in Text 2.

"Hamka once said, as scholars, we have sold ourselves to God, and we cannot be sold to anyone else."

During a classroom discussion, a student observed:

"This quote is powerful, but when we click the link and see how it's framed next to the fatwa controversy, it adds a layer, like he's being remembered more for his political stance than his religious values." (Student discussion transcript, Session 5)

This example illustrates student's growing awareness of interpersonal meta-function in digital settings, particularly how layout and hyperlink placement can influence a text's tone and focus points. In their analysis of Text 5, students also reflected on the dual use of Qur'anic citations:

"The text places 'Lakum dīnukum wa-liya dīnī' before 'fa-istabiqū al-khayrāt', I think it wants us to think of separation before cooperation. Even the order has ideology." (Focus

group discussion, FG4)

Such insights demonstrate students' capacity to critically analyze textual meta-functions, recognizing that meaning is shaped not only by what is written, but also by how it is sequenced and presented in digital form, processes that construct particular ideological readings. Further evidence of this critical engagement emerged when students designed comprehension questions for Text 4: Muhammadiyah Economic Movement. They debated whether the visuals of industry and finance used in the digital layout served to enhance or, conversely, to distort the intended message of al-Ma'un:

"The image of Buya Hamka next to that political quote makes him look like an activist, not a religious leader. That changes how we read it." (Student digital reading discussion, Session 5)

"It says 'economic empowerment,' but shows luxury buildings. That's not what Al-Ma'un is about. It's about helping the poor, right?" (Student design critique, Session 6)

"If the images only show big buildings, students might think the movement is just about wealth. But Al-Ma'un also means helping others." (Classroom reflection, Session 6)

This critique reflects an evolving awareness of ideational meta-functions within multimodal contexts, particularly in how visuals co-create or limit textual meaning. While existing literature acknowledges the potential of digital tools to deliver content interactively (Al-Mahrooqi & Denman, 2022; Suwannasom & Pattanajak, 2023), most studies emphasize technical functionality over ideological literacy. Few, if any, examine how multimodal elements, such as image placement, hyperlink pathways, and color schemes, influence the ideological reception of reading texts. In contrast, this present research demonstrates that when SFL is integrated with critical pedagogy, digital texts become more than platforms for language practice; they function as ideological artifacts that students can critically deconstruct.

The findings on critical engagement with digital and multimodal texts yield three practical contributions. First, they indicate a shift in digital reading from passive consumption to active critique, prompting students to ask, whose voices are amplified or silenced through these multimodal designs? Second, they equip students to analyze meaning across semiotic modes, including color, imagery, and hyperlink structures. Third, they reinforce the textual meta-function in digital discourse, an aspect rarely operationalized in ESP reading assessments. (see Figure 3)

Compared to prior models that treat form and content as separate entities, this study advances a framework in which form is content, an insight consistent with Halliday's conception of language as a social semiotic and Freire's view of literacy as a political act. Students' engagement with multimodal texts transformed the reading process into an act of critical inquiry. Through guided SFL analysis and dialogic classroom interactions, they come to recognize that texts are not neutral and that digital tools, far from being passive carriers of information, actively shape meaning. These findings confirm the transformative potential of integrating SFL and critical pedagogy in digital ESP contexts, offering a

replicable model for fostering critical literacy in culturally embedded education.

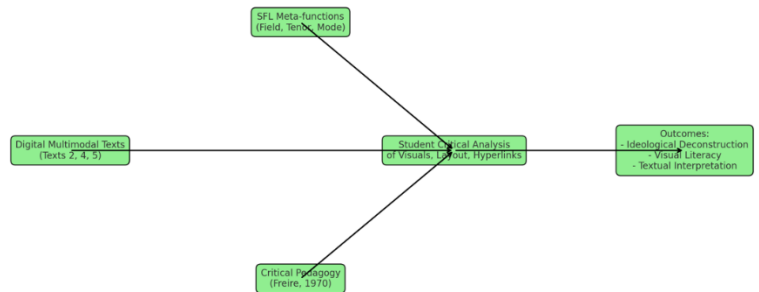


FIGURE 3 | Visual Model: Critical Engagement with Digital and Multimodal Texts

CONCLUSION

This study set out to develop and critically evaluate digital reading materials for ESP within an Islamic-Muhammadiyah higher education context by integrating Halliday's Systemic Functional Linguistics and Paulo Freire's critical pedagogy. Through a participatory action research approach, students were not merely learners but active co-authors, engaged in the co-construction of culturally relevant and ideologically embedded texts. The findings illustrate how the fusion of linguistic analysis and critical reflection can transform reading assessment into a dialogic, socially responsive practice.

One of the central findings is that students demonstrated a strong capacity to interpret texts as ideological constructs using the lens of SFL's three meta-functions, field, tenor, and mode. In analyzing texts such as "The Founding of Muhammadiyah" and "Buya Hamka," they identified how language is used to frame narratives, highlight moral perspectives, and construct social identities. Their interpretation moved beyond linguistic comprehension into the realm of ideological critique, underscoring the potential of SFL as a tool for fostering critical literacy.

Equally significant is the finding that the development of reading materials became a site for dialogic co-construction. Students collaborated with Muhammadiyah and Aisyiyah figures to select, adapt, and produce materials that reflected shared historical, cultural, and religious values. Through reflective classroom dialogue, they problematized issues such as gender representation, economic equity, and interfaith relations, revising texts to align more closely with Muhammadiyah's vision. This collaborative process not only deepened their engagement with the content but also positioned them as cultural and ideological authors, consistent with Freire's vision of transformative education.

The study also revealed the value of multimodal digital texts in facilitating critical engagement. Students were able to decode ideological meanings not only from written language but also images, hyperlinks, and text layouts. Their ability to analyze how the placement of Qur'anic verses or the sequencing of visuals influenced reader perception reflects an advanced level of critical digital literacy. This represents a significant shift from traditional print-based reading practices to a more dynamic, multimodal literacy model aligned with

the realities of contemporary digital learning environments.

Taken together, these findings offer two significant contributions. Theoretically, the research proposes a novel framework for ESP reading assessment that is culturally responsive, ideologically reflective, and digitally relevant. It challenges conventional paradigms that treat reading as a neutral cognitive act and instead positions it as a socially and politically situated practice. Practically, it offers innovations that can inform future curriculum development in Islamic and other culturally embedded education systems. Curriculum designers, policymakers, and ESP practitioners can adopt this model by integrating SFL and Critical Pedagogy, recognizing that language is used to construct meaning within diverse social contexts. Such an approach ensures that reading materials foster not only comprehension, but also critical awareness and cultural identity formation.

The study is not without limitations. Conducted within a single institutional context, the findings are context specific. Additionally, challenges in digital infrastructure, such as inconsistent internet access and varied levels of student digital literacy, may have affected the depth of engagement with the materials. Moreover, the study prioritized qualitative insights over standardized assessment metrics, leaving scope for future research to examine measurable impacts on learner outcomes.

Future studies might expand this work across a wider range of institutions, employ longitudinal designs to track the long-term effects of this framework on students' literacy and critical thinking, and explore the integration of SFL-based assessments into broader educational policies. Further investigation into the intersection of SFL, critical pedagogy, and technology across disciplines could also open new avenues for interdisciplinary education research.

In conclusion, this study highlights the transformative potential of integrating SFL with critical pedagogy in reading assessment practices. By embedding Muhammadiyah cultural values into digital learning texts and empowering students as co-creators of knowledge, it proposes a holistic, reflective, and context-sensitive approach to language education. This model not only supports linguistic development but also nurtures critical consciousness, affirming the role of language as a tool for personal growth, ideological engagement, and social transformation.

ACKNOWLEDGEMENTS

This research was funded by the Council for Higher Education, Research, and Development, Central Board of Muhammadiyah. The authors extend their sincere appreciation to the ESP students of Universitas Muhammadiyah Ponorogo, Pimpinan Daerah Muhammadiyah Ponorogo, and Ranting Aisyiyah Mangkujayan Ponorogo for their invaluable support and collaboration in the successful completion of this study.

REFERENCES

Alaqlobi, O., Alduais, A., Qasem, F., & Alasmari, M. (2024). Artificial intelligence in applied (linguistics): A

content analysis and future prospects. *Cogent Arts & Humanities*, 11(1), 2382422.

<https://doi.org/10.1080/23311983.2024.2382422>

Al-Mahrooqi, R., & Denman, C. (2022). Digital pedagogies in language education: A critical perspective. Routledge.

Ando, S. (2021). University teaching and learning in a time of social distancing: A sociocultural perspective. *Journal of Human Behavior in the Social Environment*, 31(1–4), 435–448.

<https://doi.org/10.1080/10911359.2020.1814928>

Ariyanti, A., Setiawan, S., & Munir, A. (2023). Students' enjoyment and anxiety in reminiscing about mind-mapping use in the English writing class. *Studies in English Language and Education*, 10(2), 789–804. <https://doi.org/10.24815/siele.v10i2.28215>

Basturkmen, H. (2022). Developments in English for specific purposes: A multi-perspective approach. Palgrave Macmillan.

Corbett, J., & Guilherme, M. (2021). Critical pedagogy and quality education (UNESCO SDG-4): The legacy of Paulo Freire for language and intercultural communication. *Language and Intercultural Communication*, 21(4), 447–454.

<https://doi.org/10.1080/14708477.2021.1962900>

Danis, N. (2022). A corpus analysis of disciplinary identity in evaluative journal articles: A Systemic Functional Linguistics approach. *English for Specific Purposes*, 68, 87–101. <https://doi.org/10.1016/j.esp.2022.07.003>

Delahunty, J., Verenikina, I., & Jones, P. (2014). Socio-emotional connections: Identity, belonging and learning in online interactions. A literature review. *Technology, Pedagogy and Education*, 23(2), 243–265. <https://doi.org/10.1080/1475939X.2013.813405>

Derewianka, B., & Jones, P. (2020). *Teaching language in context*. Oxford University Press.

Dreyfus, S., Humphrey, S., Mahboob, A., & Martin, J. R. (2021). *Genre pedagogy across the curriculum*. Equinox.

Fang, Z., & Schleppegrell, M. J. (2020). *Disciplinary literacies and systemic functional linguistics: Understanding texts in context*. Routledge.

Freire, P. (1970). *Pedagogy of the oppressed*. Bloomsbury.

Freire, P., & Macedo, D. P. (2014). *Pedagogy of the oppressed: 30th Anniversary Edition* (M. B. Ramos, Trans.; 30th anniversary ed.). Bloomsbury Publishing.

Gebhard, M., & Accurso, K. (2023). Pursuing a Multilingual Equity Agenda: SFL and Teacher Action Research in Hard Times. In *In Pursuit of a Multilingual Equity Agenda* (pp. 1–30). Routledge.

Godwin-Jones, R. (2020). Dealing with complexity in language learning: Automatic assessment, adaptive learning, and mobile-assisted language learning. *Language Learning & Technology*, 24(3), 1–13. <https://doi.org/10.125/44736>

Halliday, M. A. K., & Matthiessen, C. M. I. M. (2014). *Halliday's introduction to functional grammar* (4th ed.). Routledge.

Hyland, K. (2019). *Second language writing* (2nd ed.). Cambridge University Press.

- Hyland, K. (2021). *Genre and second language writing*. University of Michigan Press.
- Jackson, G. (2021). Axiological constellations in literary response writing: Critical SFL praxis in an ELA classroom. *Language and Education*, 35(5), 446–462. <https://doi.org/10.1080/09500782.2020.1856132>
- Leavy, P. (2023). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches* (2nd ed.). Guilford Press.
- Leezenberg, M. (2002). Power in communication: Implications for the semantics-pragmatics interface. *Journal of Pragmatics*, 34(7), 893–908. [https://doi.org/10.1016/S0378-2166\(01\)00067-4](https://doi.org/10.1016/S0378-2166(01)00067-4)
- Li, J., Wu, Y., & Gao, X. (2023). Language teachers' engagement with ideological representations as materials designers. *System*, 117, 103121. <https://doi.org/10.1016/j.system.2023.103121>
- Li, X., Islam, M. M., Islam, S., Gao, X., & Rong, Z. (2024). Examining professional ideology through the perspectives of higher education professionals. *Teaching and Teacher Education*, 152, 104774. <https://doi.org/10.1016/j.tate.2024.104774>
- Luke, A., & Freebody, P. (2021). *Literacy as social practice: The new literacy studies*. Routledge.
- Martin, J. R., & Rose, D. (2022). *Working with discourse: Meaning beyond the clause* (2nd ed.). Bloomsbury.
- Maton, K., & Doran, Y. (2021). *Semantic waves and knowledge-building in language education*. Routledge.
- Mochizuki, N., & Starfield, S. (2021). Dialogic interactions and voice negotiations in thesis writing groups: An activity systems analysis of oral feedback exchanges. *Journal of English for Academic Purposes*, 50, 100956. <https://doi.org/10.1016/j.jeap.2020.100956>
- Moradian, M. R., Miri, M., & Alamdar, P. (2021). The role of dialogic interaction in EFL writing assessment: A sociocultural perspective. *Indonesian Journal of Applied Linguistics*, 10(3). <https://doi.org/10.17509/ijal.v10i3.31754>
- Morton, T. (2023). Afterword: SFL, theoretical pluralism and content and language integration at the levels of curriculum, pedagogy and assessment. *International Journal of Bilingual Education and Bilingualism*, 26(3), 363–368. <https://doi.org/10.1080/13670050.2020.1806781>
- Nadia, H., Yansyah, Y., & Rafidiyah, D. (2021). Designing an online work-related language skill for nursing students: A developmental research. *JEES (Journal of English Educators Society)*, 6(1), 163–170. <https://doi.org/10.21070/jees.v6i1.1112>
- Nimasari, E. P., Setiawan, S., Munir, A., & Suhartono, S. (2023). Why didn't I make it digital: Indonesian teachers' perception of dialogical-based online teaching and socio-emotional connections. *The Qualitative Report*, 28(8). <https://doi.org/10.46743/2160-3715/2023.6105>
- Nimasari, E. P., Setiawan, S., & Munir, A. (2024). How do Indonesian student-teachers experience wellbeing during research supervision? A qualitative interview study. *International Journal of Learning, Teaching and Educational Research*, 23(3), 348–366. <https://doi.org/10.26803/ijlter.23.3.17>
- Pakir, A. (2019). Professor Michael Alexander Kirkwood (M.A.K.) Halliday, 1925–2018, founding father of Systemic Functional Linguistics. *Asian Englishes*, 21(3), 324–328. <https://doi.org/10.1080/13488678.2019.1608720>
- Pass, S. (2007). When constructivists Jean Piaget and Lev Vygotsky were pedagogical collaborators: A viewpoint from a study of their communications. *Journal of Constructivist Psychology*, 20(3), 277–282. <https://doi.org/10.1080/10720530701347944>
- Ryshina-Pankova, M., Barthold, W., & Barthold, E. (2021). Enhancing the content- and language-integrated multiple literacies framework: Systemic functional linguistics for teaching regional diversity. *System*, 96, 102403. <https://doi.org/10.1016/j.system.2020.102403>
- Silseth, K., & Gilje, Ø. (2019). Multimodal composition and assessment: A sociocultural perspective. *Assessment in Education: Principles, Policy & Practice*, 26(1), 26–42. <https://doi.org/10.1080/0969594X.2017.1297292>
- Suwannasom, W., & Pattanajak, N. (2023). Developing an integrated model of digital learning ecosystem in higher education: A study in Thai universities. *Education and Information Technologies*, 28, 1535–1554. <https://doi.org/10.1007/s10639-022-11178-6>
- Thomas, D. P. (2022). Structuring written arguments in primary and secondary school: A systemic functional linguistics perspective. *Linguistics and Education*, 72, 101120. <https://doi.org/10.1016/j.linged.2022.101120>
- Van Der Vegt, I., Kleinberg, B., & Gill, P. (2023). Proceed with caution: On the use of computational linguistics in threat assessment. *Journal of Policing, Intelligence and Counter Terrorism*, 18(2), 231–239. <https://doi.org/10.1080/18335330.2023.2165137>
- Weinmann, M., Neilsen, R., & Cabezas Benalcázar, C. (2024). Linguaging and language awareness in the global age 2020–2023: Digital engagement and practice in language teaching and learning in (post-) pandemic times. *Language Awareness*, 33(2), 347–364. <https://doi.org/10.1080/09658416.2023.2236025>
- Wijayati, R. D., & Khafidhoh, K. (2023). Developing Islamic-values-based PowToon learning media for Muhammadiyah kindergarten teachers: COVID-19 and TEYL. *English Language Teaching Educational Journal*, 5(2), 103–118. <https://doi.org/10.12928/eltej.v5i2.6475>
- Zhang, L., & Wang, J. (2024). “Curriculum-based or ideology-based”: An action research on China's curriculum-based ideology and virtuous awareness education in second language writing teaching: An activity theory perspective. *Heliyon*, 10(11), e32631. <https://doi.org/10.1016/j.heliyon.2024.e32631>

Conflict of Interest Statement: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright ©2025 Elok Putri Nimasari, Bambang Harmanto, Rinjani Bonavidi, Adi Fajaryanto Cobantoro, Elvina Dwi Cahyani, Velrinda Fahza'a Risty. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.