

Structured or emotion? Teacher and student perceptions of genre-based vs. multisensory pedagogies in EFL writing classrooms

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ABSTRACT

This study explores the effectiveness of two pedagogical approaches—genre-based (grounded in systemic functional linguistics, SFL) and multisensory instruction—in Indonesian EFL teacher education. While the genre-based approach emphasizes structured textual analysis and explicit feedback, the multisensory method integrates auditory, visual, and emotional modalities to enhance engagement. Through qualitative phenomenological analysis, including interviews and reflective journals from six students and two lecturers, the study examines perceptions of support, engagement, and skill development. Findings reveal that the genre-based approach improved grammatical precision and reduced reliance on translation tools but often led to passive learning and limited metacognitive awareness. Conversely, the multisensory approach fostered emotional-text connections and autonomous learning through techniques like the reading for emotion method (REM) and verbotonal exercises, though repetitive tasks occasionally caused fatigue. Lecturers noted that while SFL strengthened structural competence, it struggled to cultivate creativity, whereas multisensory methods enhanced engagement but required a better balance between autonomy and guidance. Theoretical implications highlight the value of integrating neuroscientific principles with sociocultural learning theories to optimize writing instruction. The study advocates for a hybrid model that combines the scaffolding benefits of genre-based pedagogy with the motivational and cognitive advantages of multisensory techniques. Recommendations include diversifying tasks to sustain engagement, reducing over-reliance on translation tools, and fostering metacognitive reflection. Future research should investigate longitudinal impacts and ideal sensory-structural balances to enhance EFL writing instruction in similar contexts.

Keywords: academic writing; EFL teacher education; multisensory learning; online learning; genre-based approach; systemic functional linguistics

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INTRODUCTION

In Indonesian EFL teacher education, academic writing represents both a pedagogical cornerstone and a persistent challenge. For pre-service teachers, it is not merely a curricular requirement but a critical skill that shapes their future roles as educators and participants in scholarly discourse (Crawford-Garrett, et.al. 2015; Ryan, 2011; Tannehill & MacPhail, 2014). Yet, in a context where English functions predominantly as a foreign academic language, the ability to produce coherent, discipline-specific texts is often hindered by limited exposure to authentic writing environments and a lack of instructional variety (Emilia, 2005; Emilia & Hamied, 2015). The stakes have only risen with the growing emphasis on English-medium instruction and international academic publishing (Curry & Lillis, 2018; Salomone, 2015).

In response, genre-based instruction—grounded in systemic functional linguistics (SFL)—has dominated Indonesian writing curricula for decades, providing structured frameworks for rhetorical and grammatical precision (Afifi, 2020). This model provides explicit instruction in rhetorical structures and linguistic features of academic genres, offering students structured scaffolding for constructing research papers, essays, and reports (Derewianka, 2015; Rose, 2012). While effective in introducing learners to disciplinary conventions, this approach has drawn criticism for potentially stifling creativity and offering limited adaptability for diverse learner profiles (Hyland, 2016; Tardy, 2025).

In contrast, multisensory approaches—informed by cognitive neuroscience—emphasize the integration of visual, auditory, kinesthetic, and emotional modalities to foster deeper engagement with writing tasks (Baehaqi, 2023; Shams & Seitz, 2008). Techniques such as text-to-speech feedback, tactile tracing, and visual mapping of ideas are designed to activate multiple neural pathways, thereby strengthening memory, motivation, and metacognitive awareness (Berninger et al., 2008). These benefits are particularly relevant in online learning contexts, where multimodal tools can compensate for the lack of physical interaction and increase student involvement (Bloomberg, 2023).

Despite institutional efforts to incorporate both models, student performance in academic writing remains uneven. Many pre-service teachers report difficulties transitioning from structured templates to independent composition, especially in remote learning environments that exacerbate feelings of isolation and reduce opportunities for real-time feedback (Baehaqi, 2023; Sudimantara, 2021). Existing studies have primarily quantified the efficacy of these methods, overlooking the lived experiences of students and lecturers—the very stakeholders who navigate their strengths and limitations daily (Baehaqi, 2023; Mazandarani, 2022). This gap is significant: without understanding how these pedagogies are perceived and enacted in real classrooms, efforts to refine writing instruction risk misalignment with learners' cognitive and emotional needs.

Grounded in Vygotsky's sociocultural theory (Abakah, 2023; Johnson & Golombek, 2011; Lantolf & Pavlenko, 1995) and “new learning” frameworks (Immordino-Yang & Damasio, 2007; Lian, 2014), this study argues that such experiential insights are essential for understanding how different pedagogical models operate in practice. Learners' emotional and cognitive responses to instructional strategies directly influence their academic engagement and development. Moreover, Indonesia's educational context—characterized by teacher-centered norms, infrastructure variability, and large class sizes—adds a crucial layer of complexity to instructional delivery (Arisandy, 2024; Sabarun, et.al., 2023).

By foregrounding stakeholder perspectives, this research contributes nuanced insights to the existing body of knowledge and offers practical guidance for the refinement of writing pedagogy in EFL teacher education. Such insights are vital to move beyond prescriptive models and toward adaptive, context-sensitive frameworks. This study addresses two key research questions:

1. How do students perceive the supportiveness of multisensory and genre-based approaches in their academic writing development?
2. What are lecturers' reflective experiences in implementing these approaches?

By examining student perspectives, the research explores whether the structured, feedback-driven genre-based method (rooted in SFL) or the emotionally and sensorially engaging multisensory approach (incorporating techniques like the reading for emotion method and verbotonal exercises) is more effective in fostering writing proficiency, autonomy, and metacognitive awareness. Simultaneously, it investigates lecturers' experiences in applying these pedagogies, including challenges such as sustaining student motivation, balancing explicit instruction with independent learning, and integrating technology. The findings aim to inform a more nuanced, context-responsive framework for EFL writing instruction in Indonesian teacher education.

LITERATURE REVIEW

Genre-based instruction and its constraints

Rooted in systemic functional linguistics (SFL), genre-based pedagogy emphasizes the mastery of textual conventions as a foundation for academic literacy (Halliday, 1985; Rose, 2012). Students learn to reproduce prototypical structures of research reports, arguments, and explanations through explicit instruction in functional grammar and discourse patterns. This scaffolding has proven effective in improving students' command of academic genres (Brisk, 2014; Gibbons, 2012; Park, et.al., 2019). However, critics argue that rigid adherence to genre templates can suppress learner creativity and reduce writing to a mechanical process (Freadman, 1988; Freadman, 2012). Swales (1990) contends that genre models often overlook innovation and the learner's role as an active meaning-maker within sociocultural contexts.

Multisensory pedagogy and cognitive engagement

Emerging from neuroscientific and multimodal learning theories, the multisensory approach repositions writing as a richly embodied, cognitive, and emotion process (Nijakowska, 2013). Rather than focusing solely on form, this approach engages multiple channels of perception—visual, auditory, gestural, and emotional—to facilitate personalized meaning-making (Cope & Kalantzis, 2015; Lian & Norman, 2017). Techniques like tactile engagement with language forms, visual concept mapping, and auditory feedback help deepen learner involvement and promote self-regulation (Berninger et al., 2008).

The reading for emotion (REM) model (Lian, 2017), grounded in (Damasio & Damasio, 1992) somatic marker hypothesis, further emphasizes emotional resonance as a gateway to comprehension and retention. This model challenges traditional text analysis by encouraging learners to respond affectively and draw connections between new content and personal experience. Such an approach aligns with recent advocacy for neurodiverse and inclusive pedagogy (Immordino-Yang & Gotlieb, 2017), which accommodates varied learning profiles by addressing both cognitive and emotional domains.

The verbotonal method, originally developed for auditory rehabilitation (Guberina & Asp, 1981), has been repurposed for language instruction to improve pronunciation and prosody through low-frequency auditory stimuli. Empirical studies (Baehaqi, 2023; Sudimantara, 2021; Yang et al., 2017) demonstrate its efficacy in enhancing not just pronunciation, but also writing fluency and expressive range—especially when integrated into broader multisensory instruction.

Comparative efficacy and theoretical integration

Comparative research suggests that while genre-based approaches are strong in building academic formality and discipline-specific literacy (Rose, 2012), they may fall short in fostering learner engagement and adaptive language use (Tardy, 2025). Conversely, multisensory models promote emotional investment and learner agency but pose challenges in balancing cognitive load and instructional coherence (Cai et al., 2021; Lian, 2014; Lian, 2020).

A more integrated perspective is gaining traction. Scholars such as (Cope & Kalantzis, 2015) argue for pedagogical hybridity, combining structured guidance with opportunities for experiential,

multimodal learning. Such integration could resolve the binary between structure and creativity, providing learners with both foundational knowledge and the freedom to innovate.

Despite the theoretical promise, empirical studies exploring these blended models—especially in the context of Indonesian teacher education—remain limited. Existing research focuses heavily on student outcomes (e.g., test scores) rather than the underlying cognitive and emotional processes that shape learning experiences. Moreover, few studies have investigated how contextual variables, such as class size, digital access, and cultural norms, mediate the success of each approach.

Literature underscores a pressing need to move beyond purely quantitative evaluations and to explore how writing pedagogies are experienced by those who implement and receive them. This study responds to that need by examining lecturer and student perceptions of multisensory and genre-based approaches within a specific cultural and institutional context. Its findings aim to inform a more inclusive, context-responsive, and cognitively grounded model of academic writing instruction in EFL settings.

METHOD

Research participants

This study employs a qualitative phenomenological approach to examine participants' lived experiences of multisensory and genre-based writing instruction (Creswell, et.al., 2018). Through thematic analysis of semi-structured interviews and reflective journals, we explore the essence of these pedagogical encounters, prioritizing participants' subjective realities (Miesel, 1991). The design specifically investigates three philosophical concepts: (1) subjectivity of conscious experience, (2) intentionality in learning encounters, and (3) being-in-the-world within educational contexts (Miesel, 1991). This study employed purposive sampling to select eight participants (six students and two lecturers) who could provide rich, experiential insights into the comparative effectiveness of genre-based and multisensory pedagogical approaches. The student participants were carefully chosen based on their demonstrated ability to reflect on and articulate their learning experiences—a criterion aligned with Moustakas' (1994), phenomenological emphasis on depth and lived experience. To ensure balanced representation, equal numbers of students were selected from each instructional group (genre-based and multisensory), allowing for meaningful comparison of pedagogical outcomes. The inclusion of two lecturers as co-researchers served a dual purpose: it provided expert perspectives on curriculum design and classroom implementation while enabling methodological triangulation, thereby strengthening the study's validity. This sample size, though small, was intentionally designed to facilitate in-depth qualitative analysis while still permitting the identification of emerging patterns (Kvale, 2007), making it well-suited for an exploratory study focused on perception, engagement, and instructional efficacy in EFL teacher education.

Research instruments

Data was gathered through two complementary qualitative instruments: (1) 30-40 minutes semi-structured Zoom interviews conducted in Bahasa Indonesia, and (2) participant-maintained reflective journals. Interviews progressed from broad opening questions ("How do you feel after this semester?") to specific probes about instructional experiences (Arksey, 1999). Journal prompts encouraged daily reflections on learning processes and emotional responses. Thematic analysis followed Moustakas (1994) phenomenological reduction process, with two experts validating the coding framework. Transcripts and journals were analyzed for patterns in three dimensions: (1) emotional engagement, (2) perceived skill development, and (3) pedagogical preferences.

The semi-structured interviews implemented a four-phase methodological framework. The initial phase, epoch (Phase I), required researchers to suspend preconceptions and immerse themselves in participants lived experiences while maintaining confidentiality through pseudonyms. Phase II (Phenomenological Reduction) involved systematically transforming raw interview data into essential components through rigorous textual analysis, employing horizontalization to treat all experiential accounts equally and bracketing to isolate significant phenomena. The subsequent Phase III (free

imaginative variation) facilitated thematic development by exploring experiential variations, eliminating redundancies, and organizing data through clustering techniques to construct fundamental structural and textual descriptions of participants' spatiotemporal experiences and perceptual qualities. The final Phase IV (reflective synthesis) integrated all emergent themes into a cohesive understanding of the phenomenon's essence, synthesizing structural and textural elements to achieve a comprehensive interpretation of the research participants' collective experiences. This structured phenomenological process ensured methodological rigor while preserving the richness of participants' subjective accounts.

Spontaneous follow-up questions during interviews enabled deeper exploration of emerging themes (Pathak & Intratat, 2018). This qualitative study explores the perceptions of lecturers and students regarding the implementation of multisensory and genre-based writing approaches in Indonesian EFL teacher education. Through thematic analysis of interviews and reflective journals, it seeks to: compare how each approach influences engagement, comprehension, and skill development; identify contextual factors that mediate their effectiveness; understand how these methods respond to the distinct demands of online writing instruction.

FINDINGS

This part presents the results by analyzing the collected data, which includes students' reflective journals and semi-structured interviews with both students (Student1C, 2C, 3C, 4C in the control group and Student5E, 6E, 7E, 8E in the experimental group) and two lecturers (Lecturer1C in the control group and Lecturer2E in the experimental group). Additional data consists of summaries of written reflection and transcripts of the recorded interviews.

RQ 1: How do students perceive the supportiveness of multisensory and genre-based approaches in their academic writing development?

Perceived support in the genre-based (SFL) approach and the multisensory approach

Students in the control group, who experienced the genre-based approach grounded in systemic functional linguistics (SFL), expressed mostly positive perceptions. Many of them reported improvements in writing proficiency, noting a reduction in their reliance on translation tools such as Google Translate.

Excerpt 1

"...I feel dizzy and do not understand this course. Because in addition to writing, we were also encouraged to think critically to produce a meaningful essay. However, with assignments, my writing skills have honed and somewhat improved compared to before, although sometimes I use Google Translate as a translator." (#student1C: reflective journals)

They also demonstrated an enhanced ability to conduct systematic analysis of texts, including theme and rheme structures. This suggests that the method supported the development of academic writing skills. Students particularly appreciated the clear explanations and interactive feedback from lecturers, along with structured guidance that made the learning process more accessible. Peer support also played a role, and a few students mentioned gaining greater confidence in writing independently as the course progressed.

However, several limitations were identified. Notably, 39% of the students admitted they had improved but were unable to clearly articulate how the genre-based approach had facilitated their development. This lack of reflexivity pointed to a disconnect between the learning activities and students' metacognitive awareness. Additionally, a number of students found the method stressful or overly complex, particularly when grappling with essay structure. For others, the approach felt repetitive, resembling previous writing courses, which led to disengagement.

In the experimental group, students exposed to the multisensory approach reported a different set of benefits and challenges. They appreciated the integration of listening, speaking, and emotional analysis as a way to deepen their writing practice. Verbotonal exercises, journaling, and the use of

aesthetic tools were considered innovative and effective for fostering engagement. Similar to the genre-based group, several students reported a reduced dependence on Google Translate, indicating improved confidence in vocabulary use and text comprehension. I can then write about and comprehend my own emotions.

Excerpt 2

"...When I undertake typical verbotonal exercises, I can understand native speakers' pronunciation and accent, as well as their emotions. I can read a few words or phrases and then say them while paying attention to the chunking, stress, and intonation of the words." (#student5E: reflective journals)

Yet not all experiences were positive. Some students found the daily multisensory tasks repetitive and overwhelming, leading to feelings of fatigue. Others struggled with technical challenges such as unstable internet connections or limited access to multimedia resources, which hindered their full participation. A few also criticized the teaching style as overly rigid, suggesting that greater flexibility would have helped them manage the workload more effectively.

The two approaches revealed contrasting sources of student support. The genre-based group largely credited their progress to the lecturer's structured guidance and feedback, while the multisensory group pointed to the specific tools and activities—like verbotonal exercises—as primary contributors to their learning. Reflexivity was another area of divergence. Students in the multisensory group were more likely (82%) to reflect on specific skill gains such as tone analysis or vocabulary development, whereas many in the genre-based group struggled to articulate what they had learned.

In terms of challenges, both groups reported feeling stressed, but the nature of their stress differed. Genre-based students often found abstract linguistic concepts confusing, while multisensory students criticized the rigidity of the schedule and the relevance of certain tasks, such as listening exercises, in relation to writing outcomes.

Overall, students perceived both instructional methods as supportive of academic writing development, though in different ways. The genre-based (SFL) approach was valued for its structured and lecturer-led design, offering clarity and a sense of progression. However, it was also limited by a lack of student reflection and occasional disengagement. On the other hand, the multisensory approach was praised for being engaging and holistic, encouraging students to connect emotionally with their writing. Yet, it was occasionally overwhelming, with rigid schedules and tasks that did not always align clearly with writing objectives.

To optimize both engagement and skill development, a hybrid model is recommended. By combining the structured framework of SFL with carefully selected multisensory activities, educators could address the shortcomings of each method while maximizing their respective strengths.

Students' perceptions of the supportiveness of multisensory and genre-based approaches in academic writing development

Based on the interview data, students expressed varied perceptions of the multisensory approach (used with the experimental group) and the genre-based approach (used with the control group). These perceptions revealed strengths and challenges in each method, shaping how students engaged with and benefited from the learning experience.

Students in the multisensory approach group viewed the method as innovative, engaging, and even transformative, despite facing some difficulties. They highlighted how the REM helped deepen their understanding of texts by connecting emotional experience to the act of writing. Student6E noted that she could recall the tone of a text because it triggered emotional awareness, while student7E shared that REM made reading more enjoyable and improved his analytical skills. The use of tools like Moodle and Praet enabled more autonomous and flexible learning, as students could complete assignments at their own pace. However, some admitted to struggling with time management and often rushed to meet deadlines.

Excerpt 3

"....when engaging in verbotonal activity, I often needed to repeat the words many times (filtered sentences and unfiltered sentences). It might take more than 30 minutes for us to complete the

verbotonal exercise and then record the sound to deliver to your email. After that, I was obligated to keep a diary. It took around an hour altogether. It's a lot to ask of oneself to set aside 1 hour daily for verbotonal activities.” (#student8E: interview)

Another major strength reported was the enhancement of writing skills and critical thinking. Students felt that the multisensory approach taught them more than grammar—it also emphasized intonation and emotional expression. Student5E explained that writing wasn't just about memorizing words but also about managing emotion and rhythm.

Extract 4

“...When I undertake typical verbotonal exercises, I can understand native speakers' pronunciation and accent, as well as their emotions. I can read a few words or phrases and then say them while paying attention to the chunking, stress, and intonation of the words...” (#student5E: interview)

Student6E echoed this sentiment, saying REM helped him better structure his arguments and use vocabulary more purposefully. Despite these benefits, students pointed out challenges as well. The daily verbotonal exercises, such as repeated voice recordings, led to boredom. Student7E remarked that it was tedious to listen to the same recordings over and over, and Student7E mentioned that setting aside an hour daily felt demanding. Additionally, while some students were self-motivated, others admitted to inconsistent participation without external accountability.

In contrast, students in the genre-based approach group appreciated the structure and emphasis on feedback, though they noted limitations in engagement and autonomy. They expressed a strong dependence on the lecturer's feedback to identify and correct their mistakes. Student2C explained that feedback helped her understand exactly what was wrong in her writing, while Student3C appreciated both giving and receiving peer feedback. The focus on one text over the semester allowed for detailed refinement of writing elements such as outlines and transitions. Student4C noted that concentrating on a single topic encouraged him to engage more deeply with the material. Moreover, students praised the lecturer's supportive demeanor, with Student2C stating that Lecturer1C's approach made students feel comfortable.

Excerpt 5

“...learning English without the presence of a lecturer or expert, in my view, is problematic. Writing in English using machine translation may be quicker and give more results. But, good quality writing still needs the assistance of people who are really specialists or experts. The results of machine translation nevertheless leave an essay with structural disorder. We still need lecturers and experts to ensure that the writing is clear. For me, input or feedback from instructors, lecturers, and experts is still immensely valuable” (#student2C: interview)

Despite these positives, some students expressed concern about over-reliance on authority figures. They often accepted feedback without question, which limited their development of independent critical thinking. Student2C admitted she complied with feedback without reflection, and Student3C said she avoided exploring new vocabulary independently, instead waiting for corrections. This passivity extended to the classroom setting, where about 75% of students were disengaged during online sessions, according to Student4C. Student2C added that many students relied heavily on tools like Google Translate, which lacked proper structure. The repetitive focus on grammar and sentence-level analysis, such as theme and rheme, was also seen as less stimulating compared to more creative approaches. Furthermore, Student4C pointed out that analyzing only one text for the entire semester restricted their exposure to diverse writing styles and genres.

Overall, the multisensory approach was praised for being engaging and holistic. It encouraged emotional and sensory involvement in writing, fostered critical thinking through REM, and offered flexible learning through technology. However, students suggested reducing repetitive tasks and incorporating more structured guidance to prevent procrastination. The genre-based approach, on the other hand, provided a clear feedback loop and helped students build specific writing skills. To improve this method, students recommended promoting more independent thinking, diversifying the texts and tasks, and increasing engagement through interactive peer-review activities.

In conclusion, students in the multisensory group felt more supported in developing creativity and critical analysis, though they required more variety to maintain motivation. Meanwhile, students in the genre-based group valued structured feedback but wished for greater autonomy and exposure to different types of writing. Based on these findings, educators are encouraged to blend the strengths of both approaches—combining genre-based scaffolding for technical skill development with multisensory techniques like REM to boost engagement. Balancing feedback with opportunities for self-exploration may help cultivate more independent, motivated writers. Ultimately, the supportiveness of each method depends on context: multisensory approaches enhance motivation and depth of learning, while genre-based instruction offers clarity and structure—both essential for academic writing development.

RQ 2: What are lecturers' reflective experiences in implementing these approaches?

Overall teaching experiences

Lecturer2E's implementation of the multisensory approach yielded several positive outcomes in student learning. Through the verbotonal method and REM techniques, students demonstrated noticeable improvements in pronunciation, writing skills, and emotional engagement with texts. The approach became successfully integrated into regular classroom practice, enabling students to internalize various writing techniques, particularly in crafting descriptive and argumentative texts with emotional depth.

Excerpt 5

"...there definitely was progress. Their listening skills improved as they trained their hearing. They began recording their own voices and listening back, which helped them get used to using correct intonation for accurate sentence pronunciation. The improvement was noticeable. At first, the students found it unusual to practice pronunciation through the verbotonal method in a course focused on academic writing." (#Lecturer2E: interview)

Lecturer2E emphasized the importance of maintaining pedagogical balance, consciously avoiding overemphasis on pure linguistics while promoting innovative methods that reduced student stress through emotional connection.

Excerpt 6

"...it seemed that this approach could be beneficial because emotions play an important role. For instance, when writing descriptive texts, it's important to convey a sense of feeling about the subject to make it engage. Similarly, in argumentative texts, emotions are essential to persuade the reader. That's how I understand it." (#Lecturer2E: interview)

Conversely, Lecturer1C's genre-based approach focused primarily on SFL, dedicating approximately 75% of instructional time to meticulous sentence-level analysis including theme/rheme patterns and transitional elements.

Excerpt 7

"...in my view, genre-based approach emphasizes grammar. It helps students become more aware of grammatical elements, such as how they structure theme and rheme in sentences, maintain coherence between ideas, and use transitional signals effectively." (#Lecturer1C: interview)

This structured methodology involved students working extensively with a single text throughout the semester, refining their arguments through systematic peer comparisons and iterative feedback cycles. However, this intensive focus on grammatical precision appeared to come at the expense of developing students' higher-order thinking skills, with limited opportunities for creative or critical engagement with content.

Excerpt 8

"...We carried out a text comparison activity. I started by selecting samples from their earlier assignments to compare with those of their classmates. The reason for this was that using peer-written texts made it easier for them to engage in peer review. I highlighted specific features and used examples from their classmates' work. I intentionally avoided using examples from professionally written texts

so the students would feel there was still room for critique. When the text comes from an external source, they often assume it's flawless and don't see the need to evaluate it critically." (#Lecturer1C: interview)

Lecturer1C's approach to using peer-written texts for comparison reflects a deliberate pedagogical strategy. By selecting student-generated texts rather than professional models, the teacher intentionally created a learning environment where students felt empowered to engage in critical analysis without the intimidation of perceived "perfect" texts. This choice reveals an understanding of student psychology—peer texts are viewed as more relatable and open to critique, lowering affective barriers and fostering a sense of shared learning. The lecturer's avoidance of external texts highlights an awareness of how authority is unconsciously assigned to published works, which can stifle students' willingness to question or analyze.

Effectiveness of instructional methods

The multisensory approach proved particularly effective in fostering autonomous learning behaviors. Verbotonal exercises, such as regular voice recordings, encouraged independent practice, though the daily repetition eventually led to diminished student interest.

Excerpt 9

"...how was it? Well... it wasn't disruptive at all. In fact, the verbotonal activity supported their independent learning. Rather than interfering, it actually enhanced the learning process. Students were able to manage their time based on their own availability, which helped them develop autonomy in their learning". (#Lecturer2E: interview)

The students learned to sense the emotions embedded in the sentences. As a result, they were able to quickly grasp and remember new vocabulary they hadn't encountered before, with the help of the internet to support their memorization. It created a kind of learning ecosystem. They began to recognize emotional nuances in every word, sentence, phrase, paragraph, and even throughout the entire text. They uncovered the emotional layers within the text.

The REM component successfully created emotional-text connections, enabling students to internalize vocabulary and meaning through affective engagement, which translated to improved diction and coherence in their writing. While technological integration through apps and Moodle streamlined assignment submissions, an emerging concern was students' growing dependence on tools like Google Translate, which risked promoting superficial learning outcomes.

The genre-based approach demonstrated clear strengths in developing grammatical mastery, with students showing marked improvement in constructing coherent sentences using proper theme/rheme structures.

Excerpt 10

"...several improvements have taken place. Firstly, I've observed progress in their use of English grammar when forming sentences. They've gained an understanding of how to apply theme and rheme effectively. In my opinion, the skill of linking theme and rheme within sentences is a crucial component of writing a strong essay." (#Lecturer1C: interview)

The peer critique system effectively promoted collaborative learning, though passive learners often required direct instructors to fully participate. A significant challenge emerged from students' heavy reliance on machine translation, frequently resulting in unnatural English expressions that required extensive lecturer intervention to correct.

Student engagement patterns

Initial student response to the multisensory approach was overwhelmingly positive, with high participation rates in verbotonal exercises and REM activities. The incorporation of aesthetic elements and sensory techniques, particularly intonation practice, successfully deepened textual engagement.

Excerpt 11

"...my students showed strong motivation to learn through the techniques I implemented. In the initial stage, the verbotonal activity allowed them to practice independently at home, outside the classroom, helping them become familiar with unfamiliar patterns. In the following stage, Reading for Emotion, they applied it effectively and followed classroom instructions well. Although they didn't use the Aesthetics approach often, they began to adapt to the learning tools I introduced and appeared to be actively involved in self-directed learning". (#Lecturer2E: interview)

However, maintaining this level of enthusiasm proved challenging over time as the repetitive nature of certain tasks led to waning interest.

Excerpt 12

"...the students seemed very motivated and followed the instructions I gave closely. However, as the weeks went on, signs of boredom started to appear. They looked noticeably uninterested. I suppose that's understandable, considering the verbotonal activity requires daily commitment. They had to do the exercises for at least 40 minutes each day, record their voices daily, upload the recordings, and so on". (#Lecturer2E: interview)

The genre-based approach faced more fundamental engagement challenges, with only about 25% of students maintaining consistent active participation in online settings.

Excerpt 13

"...to be honest, since the learning took place online, only about 25% of the students seemed genuinely active and enthusiastic during the lectures. However, for me, that level of participation was already enough to support meaningful text discussions." (#Lecturer1C: interview)

Technical difficulties, including unreliable internet connections, further exacerbated participation issues. While students who mastered general-to-specific structural principles produced stronger essays, many required repeated explanations of these core concepts, indicating potential gaps in instructional delivery or conceptual understanding.

Identified challenges

Both approaches encountered distinct implementation challenges. The multisensory method struggled with maintaining student interest in daily verbotonal drills and finding the optimal balance between fostering autonomy and providing necessary guidance, particularly in online learning environments.

Excerpt 14

"...Their vocabulary was limited—or perhaps they did have some vocabulary knowledge but found it challenging to express it. So how can we tackle this issue? The main limitation was, indeed, vocabulary. Being in Indonesia, many of the words might have been unfamiliar to them. Additionally, even when students knew certain vocabulary, they often struggled to use it effectively in writing. Comprehension was also a challenge. That's where this approach has proven helpful." (#Lecturer2E: interview)

The genre-based approach faced motivational hurdles, as students frequently failed to recognize the relevance of SFL principles beyond basic grammar instruction, despite their importance for advanced academic writing.

Excerpt 15

"...in theory, what I explained, they understood it 100%, but in practice, I had to explain it again up to three times for them to comprehend, review, and revise." (#Lecturer1C: interview)

"...what is certain is the issue of weak motivation in learning. Then, I'm not saying that the lecturer is uninteresting, but sometimes an engaging presentation style makes students more enthusiastic in online classes." (#Lecturer1C: interview)

Technical limitations, especially inconsistent internet access, and problematic dependence on translation tools presented additional barriers to authentic writing development. The study revealed that while the multisensory approach successfully promoted emotional connection and autonomous

learning, it required greater task variety to sustain long-term engagement. The genre-based approach excelled in developing grammatical precision but lacked effective strategies for maintaining student motivation and addressing over-reliance on translation technologies. Both lecturers acknowledged technology's dual role as both facilitator and potential obstacle, with digital platforms offering convenience while sometimes encouraging superficial learning practices. These findings suggest the need for a more integrated approach that combines the strengths of both methodologies while addressing their respective limitations.

DISCUSSION

From a neuroscientific perspective, the success of the multisensory approach aligns with theories of multimodal learning (Shams & Seitz, 2008) and brain plasticity. The students' positive responses to verbotonal exercises and emotional text analysis support the notion that multiple neural pathways are activated when language learning incorporates auditory, visual, and kinesthetic elements. This is particularly relevant given that procedural memory systems (Ullman & Pullman, 2015) are engaged more effectively through varied sensory input, leading to deeper encoding of language patterns. However, the reported stress from intensive daily tasks suggests potential cognitive overload (Soliman & Al-Madani, 2017) indicating the need for carefully balanced multisensory integration.

The genre-based (SFL) approach findings correlate strongly with Vygotsky's sociocultural theory (Lantolf & Pavlenko, 1995) and systemic functional linguistics (Halliday, 1985). The valued lecturer guidance and structured feedback mechanisms reflect the importance of scaffolded learning in the zone of proximal development (ZPD). However, the limited student reflexivity (39%) suggests that while the approach effectively builds declarative knowledge (Harvey, 1996; Webster, 2016), it may not sufficiently develop metacognitive awareness (Flavell, 1979) of the learning process itself. This aligns with critiques of traditional genre pedagogy as potentially overly formulaic (Hyland, 2002; Hyland, 2016).

From an SLA perspective, the multisensory group's superior reflexivity (82%) supports Schmidt's noticing hypothesis (Schmidt, 1995; Schmidt, 1990) as the varied sensory input likely enhanced conscious attention to language forms. The reduced reliance on translation tools in both groups suggests development of conceptual fluency (Danesi, 2003), though through different pathways: explicit rule-learning (SFL) versus implicit multisensory association (verbotonal). The reported stress in both approaches relates to Krashen's affective filter hypothesis (Hammond, 1990; Krashen, 1991) with the SFL group experiencing anxiety from abstract concepts, and the multisensory group from workload intensity.

In ELT terms, the findings support task-based language teaching principles (Ellis, 2017) in the multisensory approach, while the SFL results endorse genre pedagogy (Martin & Rose, 2008). The recommendation for a hybrid model finds theoretical support in content and language integrated learning (CLIL) approaches (Coyle, 2015), which balance structured input with experiential learning. The technical challenges reported highlight the growing importance of digital literacy in contemporary ELT (Ware et al., 2012).

The contrasting autonomy versus structure findings reflect fundamental debates in language pedagogy between teacher-centered and learner-centered approaches (Nunan, 2004). While the SFL group valued explicit instruction, the multisensory group's engagement with tools aligns with constructivist learning theories (Piaget, 1976; Waite-Stupiansky, 2022). This dichotomy suggests the need for differentiated instruction (Huebner, 2010; Tomlinson, 2017) in EFL writing classrooms.

These findings suggest that an optimal EFL writing pedagogy should integrate neuroscientific principles of multimodal learning with SLA-informed balanced approaches to explicit and implicit instruction. The proposed hybrid model could potentially create synergistic learning effects by combining the cognitive benefits of structured genre analysis with the neurological advantages of multisensory input. Future research should explore how such integration affects long-term writing development while considering individual differences in learning styles and cognitive processing. This study contributes to ongoing discussions about evidence-based language teaching (Lantolf & Esteve,

2019) by grounding pedagogical choices in both learner perceptions and established theoretical frameworks.

The research findings offer significant insights when analyzed through combined neuroscientific and pedagogical frameworks. The multisensory approach's demonstrated effectiveness aligns with (Damasio, 1999) somatic marker hypothesis, which positions emotion as fundamental to cognitive processing and learning. This neurological foundation explains students' enhanced engagement through the REM, consistent with Lian and Sussex's (2018) research on affective neuroscience. The verbotonal method's success in improving pronunciation and writing fluency not only supports (Guberina & Asp, 1981) findings regarding auditory-emotion integration but also reinforces (Cai et al., 2021; Damasio et al., 1976) work on cerebral lateralization through dichotic listening.

From a genre-based perspective, the findings present a nuanced view of (Halliday, 1985) systemic functional linguistics framework. While students developed strong grammatical competence – supporting Halliday's (1992) language as social semiotic theory – their difficulties with creative expression and higher-order thinking echo (Hyland, 2016) critiques of potential limitations in genre pedagogy. The observed over-reliance on instructor feedback particularly underscores Kramersch's (2000) concerns about social discursive constructions of self in L2 learning, where students may develop dependent rather than autonomous learning identities.

The multisensory approach's success in fostering procedural knowledge through experiential learning exemplifies Immordino-Yang and Damasio's (2007) concept of the essential mind-body connection in education. Students' internalization of writing techniques through REM supports (Lian & Pertiwi, 2017) framework of academic writing as applied aesthetics, where multisensory engagement enhances learning outcomes. However, the reported habituation effects from repetitive exercises validate (Ramachandran & Hirstein, 1999) neurological principles about stimulus adaptation, highlighting the need for what Cope and Kalantzis (2015) describe as "pedagogical balancing" in digital learning environments.

Conversely, while effective for developing grammatical precision, the genre-based approach's focus on declarative knowledge appears to have neglected the creative dimensions of genre mastery identified by Freadman (1994). The passive learning tendencies observed reflect (Lian & Sussex, 2018) caution against purely structural approaches to language teaching, where cognitive development may progress without corresponding emotional and social learning.

These findings suggest several evidence-based recommendations for integrated pedagogy. First, neuroscience-informed blended learning could combine REM techniques with carefully sequenced genre analysis, following Baehaqi's (2023) model of multisensory technology integration while maintaining Damasio's (1999) embodied cognition principles. Second, differentiated task design using Cope and Kalantzis' (2015) "teacher as designer" framework could create varied sensory experiences that prevent habituation while developing both procedural and declarative knowledge. Third, critical genre pedagogy might adapt Hyland's (2002) genre-based instruction with REM's emotional engagement to create an "affective genre pedagogy" valuing both structural competence and creative expression. Finally, autonomy-supportive technology use could apply Lian's (2014) CALL principles to promote strategic digital tool use while reducing over-reliance on translation software.

This study strongly supports an integrated approach to EFL writing instruction that incorporates both neuroscientific principles and pedagogical best practices. Future research should investigate optimal sensory modality combinations in writing instruction, examine individual differences in responsiveness to different approaches, develop more sophisticated assessment metrics for cognitive and affective dimensions of writing development, and explore longitudinal effects of integrated approaches. By grounding pedagogical innovation in neuroscience and established language learning theories, educators can develop more effective, engaging, and neurologically sound approaches to EFL writing instruction that foster both technical proficiency and authentic voice.

The lecturers' reflective experiences in implementing these contrasting pedagogical approaches offer valuable insights into the neuroscience of language learning. Dr. Leo's successful implementation of the multisensory approach powerfully demonstrates the critical role of emotion in learning, strongly

supporting (Damasio, 1999) somatic marker hypothesis. This theoretical framework explains how emotional states fundamentally shape cognitive processing, which manifested clearly in students' enhanced engagement through the REM. Sudimantara (2021) research in affective neuroscience provides further validation, showing how emotional connections in language learning create more durable memory traces and deeper comprehension. The significant improvements in pronunciation achieved through verbotonal exercises additionally corroborate (Guberina & Asp, 1981) findings about this method's effectiveness in developing prosodic awareness through integrated auditory-kinesthetic learning.

The genre-based approach's limitations in developing higher-order thinking skills present an important critique of SFL (Halliday, 1992) in practice. While SFL undeniably provides valuable scaffolding for academic writing (Freadman, 2002), the control group lecturer's experiences reveal how an overemphasis on grammatical forms can come at the expense of creative expression. This finding aligns with (Immordino-Yang & Damasio, 2007) identification of emotional and cognitive dimensions as essential for meaningful learning - aspects that appeared neglected in the strict SFL approach. The students' difficulties with argumentation further suggest that purely structural methodologies may fail to engage the neural networks associated with critical thinking and self-reflective cognition (Ramachandran & Hirstein, 1999; Ramachandran & Rogers-Ramachandran, 2010).

Regarding pedagogical effectiveness and student engagement, the multisensory approach's success in fostering autonomous learning strongly supports (Sudimantara, 2021) arguments about differentiated learning in technology-enhanced environments. However, the observed monotony from repetitive exercises highlights the neurological principle of habituation (Ramachandran & Hirstein, 1999), indicating the need for varied sensory input to maintain optimal neural plasticity. The emotional-text connections facilitated by REM beautifully illustrate (Damasio, 1999) the concept of embodied cognition, showing how physical experiences of emotion through prosodic practice can enhance linguistic understanding. In contrast, the genre-based approach's technical precision, while valuable, clearly sacrificed student motivation, demonstrating the limitations of cognitive approaches that undervalue affective factors (Immordino-Yang, 2011; Immordino-Yang et al., 2012). The prevalent reliance on Google Translate across both approaches further exemplifies identified tension between technological convenience and authentic language development.

These findings suggest several important recommendations for integrated pedagogy. First, creating emotionally-engaged genre instruction by combining REM techniques with SFL analysis could achieve what (Freadman, 1988) terms "genre awareness with emotional resonance." Second, differentiated verbotonal applications, following (Guberina & Asp, 1981) principles, could maintain neural engagement through varied sensory-motor activities. Third, critical technology integration based on CALL principles could help students use digital tools more judiciously. Finally, neuroscience-informed task design following (Immordino-Yang, 2011) research could optimize the emotional-cognitive balance in writing assignments.

Ultimately, this study strongly supports (Damasio, 1999) concept of the "embodied mind" in language education, demonstrating that effective writing pedagogy must engage learners cognitively, emotionally, and physically. The most promising path forward appears to be a carefully balanced integration of multisensory learning's neurological benefits with genre-based approaches' structural rigor, creating a more holistic writing instruction that develops both technical proficiency and authentic voice. This synthesis addresses the limitations of each approach while capitalizing on their respective strengths, potentially offering an optimal framework for EFL writing instruction.

CONCLUSION

This study examined the effectiveness of two contrasting approaches to academic writing instruction-the multisensory approach and the genre-based (SFL) approach-through students' learning experiences and lecturers' teaching reflections. Students exposed to the genre-based method appreciated its structured feedback system and systematic analysis of textual elements, which helped

reduce their dependence on translation tools. However, a significant portion (39%) struggled to articulate how this approach benefited their writing development, revealing gaps in metacognitive awareness, while others found the methodology either repetitive or overly complex, leading to passive learning behaviors and excessive reliance on instructor guidance. In contrast, the multisensory approach fostered stronger emotional engagement through techniques like the REM and improved pronunciation as well as speaking via verbotonal exercises, though some students reported fatigue from repetitive tasks and faced challenges with technical implementation.

The lecturers' experiences mirrored these student perceptions. The multisensory instructor successfully integrated emotional and sensory elements to enhance engagement and pronunciation, but faced difficulties in sustaining student motivation and finding the right balance between autonomy and structured guidance. Meanwhile, the genre-based instructor observed strong development in grammatical precision but noted limited student engagement, over-reliance on translation tools, and challenges in cultivating higher-order thinking skills within the rigid SFL framework. These findings gain deeper significance when viewed through theoretical lenses. The success of multisensory techniques aligns with somatic marker hypothesis, demonstrating how emotional engagement strengthens learning, while the genre-based approach's scaffolding effects reflect sociocultural theory, though its limitations in fostering creativity suggest the need for complementary methods.

Considering these insights, the study proposes an integrated pedagogical model that combines the strengths of both approaches while mitigating their weaknesses. Such a hybrid would incorporate the genre-based method's structural rigor for developing grammatical accuracy alongside multisensory techniques to maintain engagement and promote deeper reflection. This balanced approach would also need to carefully manage feedback mechanisms to encourage learner autonomy without creating dependency. Future research directions should investigate optimal combinations of sensory and structural elements, examine long-term impacts on writing proficiency, and develop strategies to reduce students' reliance on translation technologies. Ultimately, this study underscores the value of synthesizing neuroscientific principles with established pedagogical theories to create a more holistic writing instruction framework that develops both technical competence and creative expression, ultimately fostering more independent and motivated academic writers.

REFERENCES

- Abakah, E. (2023). Teacher learning from continuing professional development (CPD) participation: A sociocultural perspective. *International Journal of Educational Research Open*, 4, 100242. <https://doi.org/10.1016/J.IJEDRO.2023.100242>
- Afifi, N. (2020). *Introducing genre-based pedagogy to the teaching of literature reviews in an Indonesian EFL context* [Macquarie University]. Retrieved from <https://figshare.mq.edu.au/ndownloader/files/42125451>
- Arisandy, F. (2024). Dealing with difficult large classes in ELT contexts. In O. Effiong, B. Batziakas, & K. Ben Abbes (Eds.), *Hybrid learning in English language teaching: Motivation, challenges and opportunities* (pp. 225–241). Cambridge Scholars Publishing.
- Arksey, H. (1999). Interviewing for social scientists: An introductory resource with examples. In H. Arksey & P. T. Knight (Eds.), *Interviewing for Social Scientists* (pp. 1–224). New York: Sage Publisher.
- Baehaqi, L. (2023). *Supporting academic writing skills of pre-service english language teachers in indonesia in an online learning environment: A multisensory approach* [Unpublished Doctoral dissertation]. Charles Darwin University.
- Berninger, V. W., Winn, W. D., Stock, P., Abbott, R. D., Eschen, K., Lin, S. J., ... Nagy, W. (2008). Tier 3 specialized writing instruction for students with dyslexia. *Reading and Writing*, 21(1–2), 95–129. <https://doi.org/10.1007/S11145-007-9066-X>
- Bloomberg, L. D. (2023). A conceptual framework for multimodal engagement in online higher education. *Journal of Online Graduate Education*, 6(1). <https://doi.org/10.5281/ZENODO.7858922>

- Brisk, M. E. (2014). Engaging students in academic literacies: Genre-based pedagogy for K-5 Classrooms. *Engaging Students in Academic Literacies*. <https://doi.org/10.4324/9781317816164>
- Cai, X., Lian, A., Puakpong, N., Shi, Y., Chen, H., Zeng, Y., ... Mo, Y. (2021). Optimizing auditory input for foreign language learners through a verbotonal-based dichotic listening approach. *Asian-Pacific Journal of Second and Foreign Language Education*, 6(1), 1–20. <https://doi.org/10.1186/S40862-021-00119-0>
- Cope, B., & Kalantzis, M. (2015). The things you do to know: An introduction to the pedagogy of multiliteracies. *A Pedagogy of Multiliteracies*, 1–36. https://doi.org/10.1057/9781137539724_1
- Coyle, D. (2015). Strengthening integrated learning: Towards a new era for pluriliteracies and intercultural learning. *Latin American Journal of Content & Language Integrated Learning*, 8(2), 84–103. <https://doi.org/10.5294/5915>
- Crawford-Garrett, K., Anderson, S., Grayson, A., & Suter, C. (2015). Transformational practice: critical teacher research in pre-service teacher education. *Educational Action Research*, 23(4), 479–496. <https://doi.org/10.1080/09650792.2015.1019902>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry research design: Choosing among five approaches* (4th Edition). Sage Publications.
- Curry, M. J., & Lillis, T. (2018). *Global academic publishing: Policies, perspectives and pedagogies* (M. J. Curry & T. Lillis, Eds.). Retrieved from [https://books.google.co.id/books?hl=en&lr=&id=GMJ2DwAAQBAJ&oi=fnd&pg=PA1998&dq=The+stakes+have+only+risen+with+the+growing+emphasis+on+English-medium+instruction+and+international+academic+publishing+\(Curry+%26+Lillis,+2018\).&ots=ikfEp8bbuk&sig=GAzSUGwsXJuy3iM64WXVfqSopxE&redir_esc=y#v=onepage&q&f=false](https://books.google.co.id/books?hl=en&lr=&id=GMJ2DwAAQBAJ&oi=fnd&pg=PA1998&dq=The+stakes+have+only+risen+with+the+growing+emphasis+on+English-medium+instruction+and+international+academic+publishing+(Curry+%26+Lillis,+2018).&ots=ikfEp8bbuk&sig=GAzSUGwsXJuy3iM64WXVfqSopxE&redir_esc=y#v=onepage&q&f=false)
- Damasio, H., Damasio, A. R., Castro-Caldas, A., & Ferro, J. M. (1976). Dichotic listening pattern in relation to interhemispheric disconnection. *Neuropsychologia*, 14(2), 247–250. [https://doi.org/10.1016/0028-3932\(76\)90055-5](https://doi.org/10.1016/0028-3932(76)90055-5)
- Damasio, A. R., & Damasio, H. (1992). Brain and language. *Scientific American*, 267(3), 89–95. <https://doi.org/10.1038/SCIENTIFICAMERICAN0992-88>
- Damasio, A. R. (1999). How the brain creates the mind. *Scientific American*, 281(6), 112–117. <https://doi.org/10.1038/SCIENTIFICAMERICAN1299-112>
- Danesi, M. (2003). *Second language teaching: A view from the right side of the brain*. Springer Science & Business Media.
- Derewianka, B. (2015). *The contribution of genre theory to literacy education in Australia*. Retrieved from <https://ro.uow.edu.au/sspapers>
- Ellis, R. (2017). Task-based language teaching. *The Routledge Handbook of Instructed Second Language Acquisition*, 108–125. <https://doi.org/10.4324/9781315676968-7>
- Emilia, E. (2005). *A critical genre-based approach to teaching academic writing in a tertiary EFL context in Indonesia* [The University of Melbourne]. Retrieved from https://www.academia.edu/download/105635552/81416_1234.pdf
- Emilia, E., & Hamied, F. A. (2015). Systemic functional linguistic genre pedagogy (SFL GP) in a tertiary efl writing context in Indonesia. *TEFLIN Journal - A Publication on the Teaching and Learning of English*, 26(2), 155. <https://doi.org/10.15639/teflinjournal.v26i2/155-182>
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist*, 34(10), 906–911. <https://doi.org/10.1037/0003-066X.34.10.906>
- Freadman, A. (1988). Untitled: (On genre). *Cultural Studies*, 2(1), 67–99. <https://doi.org/10.1080/09502388800490041>
- Freadman, A. (1994). *Anyone for tennis? [in:] Genre and the new rhetoric*. P. Medway.
- Freadman, A. (2002). The invention of genres. *Canadian Review of Comparative Literature*, 29(2–3), 343–376.
- Freadman, A. (2012). The traps and trappings of genre theory. *Applied Linguistics*, 33(5), 544–563.

- <https://doi.org/10.1093/APPLIN/AMS050>
- Gibbons, P. (2012). Scaffolding academic language and literacy with school-aged English language learners. *The European Journal of Applied Linguistics and TEFL*, 1(2), 51–64.
- Guberina, P., & Asp, C. (1981). The verbo-tonal method for rehabilitating people with communication problems. *Monograph 13, World Rehabilitation*. Retrieved from http://www.hsfweb.org/wp-content/uploads/2012/12/Guberina_Asp-paper_Verbotonal-Method.pdf
- Halliday, M. A. K. (1985). *An introduction to functional grammar*. Edward Arnold.
- Halliday, M. A. K. (1992). Language theory and translation practice. In *Rivista internazionale di tecnica della traduzione* n°0, Udine, *Campanotto Editore* (pp. 15-25)
- Hammond, R. M. (1990). The affective filter and pronunciation proficiency — attitudes and variables in second language acquisition. *Language Proficiency*, 65–71. https://doi.org/10.1007/978-1-4899-0870-4_6
- Harvey, L. (1996). Transfer of declarative knowledge in complex information-processing domains. *Human-Computer Interaction*, 11(1), 69–96. https://doi.org/10.1207/S15327051HCI1101_3
- Huebner, T. A. (2010). Differentiated instruction. *Educational Leadership*, 67(5), 79–81. <https://doi.org/10.4324/9781315639987-26>
- Hyland, K. (2002). 6. Genre: Language, context, and literacy. *Annual Review of Applied Linguistics*, 22, 113–135. <https://doi.org/10.1017/S0267190502000065>
- Hyland, K. (2016). Methods and methodologies in second language writing research. *System*, 59, 116–125. <https://doi.org/10.1016/J.SYSTEM.2016.05.002>
- Immordino-Yang, M. H., & Damasio, A. (2007). We feel, therefore we learn: The relevance of affective and social neuroscience to education. *Mind, Brain, and Education*, 1(1), 3–10. <https://doi.org/10.1111/J.1751-228X.2007.00004.X>
- Immordino-Yang, M. H. (2011). Implications of affective and social neuroscience for educational theory. *Educational Philosophy and Theory*, 43(1), 98–103. <https://doi.org/10.1111/J.1469-5812.2010.00713.X>
- Immordino-Yang, M. H., Christodoulou, J. A., & Singh, V. (2012). Rest is not idleness: Implications of the brain's default mode for human development and education. *Perspectives on Psychological Science*, 7(4), 352–364. <https://doi.org/10.1177/1745691612447308>
- Immordino-Yang, M. H., & Gotlieb, R. (2017). Embodied brains, social minds, cultural meaning: Integrating neuroscientific and educational research on social-affective development. *American Educational Research Journal*, 54(1_suppl), 344S-367S. <https://doi.org/10.3102/0002831216669780>
- Johnson, K. E., & Golombek, P. R. (2011). *Research on second language teacher education: A sociocultural theoretical perspective on teacher professional development*. Routledge
- Kramsch, C. (2000). Social discursive constructions of self in L2 learning. In James, P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 133–153). Oxford University Press.
- Krashen, S. K. (1991). The input hypothesis: An update. In J. E. Alatis (Ed.), *Georgetown University Round Table on Language and Linguistics 1991*. Washington: Georgetown University Press.
- Kvale, S. (2007). Contradictions of assessment for learning in institutions of higher learning. *Rethinking Assessment in Higher Education: Learning for the Longer Term*, 57–71. <https://doi.org/10.4324/9780203964309-13>
- Lantolf, J. P., & Esteve, O. (2019). Concept-based instruction for concept-based instruction: A model for language teacher education. In M. Sato & S. Loewen (Eds.), *Evidence-based second language education* (Vol. 1). Routledge.
- Lantolf, J. P., & Pavlenko, A. (1995). Sociocultural theory and second language acquisition. *Annual Review of Applied Linguistics*, 15, 108–124. <https://doi.org/10.1017/S0267190500002646>
- Lian, A. B. (2014). “New Learning” and CALL: a DIY paradigm. *AsiaCALL OnLine Journal*, 9, A14–A26. Retrieved from http://asiacall.info/acoj/wp-content/uploads/2014/05/Lian_AB_ACOJv09_final.pdf

- Lian, A. (2017). Reading for emotion with ICT tools. *Proceedings of the 25th International Conference on Computers in Education (Internationally Refereed Proceedings)*. Asia-Pacific Society for Computers in Education.
- Lian, A. (2020). *What axioms inform your research? Dialogizing for innovation in English language and literacy pedagogy*. 394(Icirad 2019), 440–448. <https://doi.org/10.2991/assehr.k.200115.073>
- Lian, A., & Norman, A. (2017). A dialog, evidence-based framework for intergrating technology into school curricula. In A. Lian, P. Kell, P. Black, & K. Y. Lie (Eds.), *Challenges in global learning: dealing with education issues from an international perspective* (1st ed., pp. 314-349). Cambridge Scholars Publishing.
- Lian, A., & Pertiwi, W. H. S. (2017). Theorising for innovation: Implications for English language teacher education. *GEMA Online Journal of Language Studies*, 17(3), 1–17. <https://doi.org/10.17576/gema-2017-1703-01>
- Lian, A., & Sussex, R. (2018). Toward a critical epistemology for learning languages and cultures in twenty-first century Asia. *Multilingual Education*, 24, 37–54. https://doi.org/10.1007/978-3-319-69995-0_3
- Martin, J. R., & Rose, D. (2008). *Genre relations: Mapping culture*. Equinox Publishing Ltd
- Mazandarani, O. (2022). Philosophical assumptions in ELT research: A systematic review. *Asia-Pacific Education Researcher*, 31(3), 217–226. <https://doi.org/10.1007/S40299-021-00554-0>
- Miesel, J. A. (1991). *A phenomenological exploration of the experience of voluntarily changing one's career during midlife* [The Union Institute]. Retrieved from <https://www.proquest.com/openview/0b810f5bbf91617173f549ac646864d2/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Moustakas, C. (1994). *Phenomenological research methods*. <https://doi.org/https://doi.org/10.4135/9781412995658>
- Nijakowska, J. (2013). Multisensory structured learning approach in teaching foreign languages to dyslexic learners. *Second Language Learning and Teaching*, 16, 201–215. https://doi.org/10.1007/978-3-319-00044-2_14
- Nunan, D. (2004). *Task-based language teaching*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511667336>
- Park, Y., Xu, Y., Collins, P., Farkas, G., & Warschauer, M. (2019). Scaffolding learning of language structures with visual-syntactic text formatting. *British Journal of Educational Technology*, 50(4), 1896–1912. <https://doi.org/10.1111/BJET.12689>
- Pathak, A., & Intrat, C. (2018). Use of semi-structured interviews to investigate teacher perceptions of student collaboration. *Malaysian Journal of ELT Research*, 8(1), 1–10. Retrieved from <https://www.business.dk/oekonomi/oekonomer-med-klar-melding-ingen-rentestigning-i-2018>
- Piaget, J. (1976). Piaget's theory. In B. Inhelder, H. Chipman, & C. Zwingmann (Eds.), *Piaget and His School*. Springer Study Edition.
- Ramachandran, V. S., & Hirstein, W. (1999). The science of art: A neurological theory of aesthetic experience. *Journal of Consciousness Studies*, 6(6–7), 15–51.
- Ramachandran, V. S., & Rogers, D. (2008). I see, but I don't know. *Scientific American Mind*, 19(6), 20–23.
- Ramachandran, V. S., & Rogers-Ramachandran, D. (2010). Reading between the lines. *Scientific American Mind*, 21(4), 18–20. <https://doi.org/10.1038/SCIENTIFICAMERICANMIND0910-18>
- Rose, D. & M. J. (2012). *Learning to write, reading to learn: Genre, knowledge and pedagogy in the Sydney school*. Equinox Publishing.
- Ryan, M. (2011). Spaces of possibility in pre-service teacher education. *British Journal of Sociology of Education*, 32(6), 881–900. <https://doi.org/10.1080/01425692.2011.614745>
- Sabarun, S., Widiati, U., Suryati, N., & Azman, M. N. A. (2023). Measuring the effect of learning style preference on learners' argumentative essay writing across different writing strategies.

- Journal of Higher Education Theory and Practice*, 23(5), 187–201.
<https://doi.org/10.33423/JHETP.V23I5.5935>
- Salomone, R. (2015). The rise of global English: Challenges for English-medium instruction and language rights. *Language Problems and Language Planning*, 39(3), 245–268.
<https://doi.org/10.1075/LPLP.39.3.03SAL>
- Schmidt, R. W. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129–158. <https://doi.org/10.1093/APPLIN/11.2.129>
- Schmidt, R. W. (1995). Consciousness and foreign language learner: A tutorial on the role of attention and awareness in language learning. In R. Schmidt (Ed.), *Attention and Awareness in Foreign Language Learning*. University of Hawaii.
- Shams, L., & Seitz, A. R. (2008). Benefits of multisensory learning. *Trends in Cognitive Sciences*, 12(11), 411–417. <https://doi.org/10.1016/J.TICS.2008.07.006>
- Soliman, M. S., & Al-Madani, F. M. (2017). The effects of multisensory-based instruction combined with brain-compatible environment techniques on reading fluency and reading comprehension of fourth-grade students with dyslexia. *Croatian Journal of Education : Hrvatski Časopis Za Odgoj i Obrazovanje*, 19(2), 363–397. <https://doi.org/10.15516/CJE.V19I2.2190>
- Sudimantara, L. B. (2021). *Transformative learning and student agency in academic writing in undergraduate English language teacher education degree programs in Indonesia* [Unpublished PhD Thesis]. Charles Darwin University.
- Swales, J. M. (1990). Genre analysis: English in academic and research settings. *Language*.
<https://doi.org/10.2307/416471>
- Tannehill, D., & MacPhail, A. (2014). What examining teaching metaphors tells us about pre-service teachers' developing beliefs about teaching and learning. *Physical Education and Sport Pedagogy*, 19(2), 149–163. <https://doi.org/10.1080/17408989.2012.732056>
- Tardy, C. M. (2025). Teaching second language academic writing. *Elements in Language Teaching*.
<https://doi.org/10.1017/9781009638326>
- Tomlinson, C. A. (2017). Differentiated instruction. In C. M. Callahan & H. L. Hertberg-Davis (Eds.), *Fundamentals of gifted education considering multiple perspectives* (2nd Edition, pp. 1–576). Routledge.
- Ullman, M. T., & Pullman, M. Y. (2015). A compensatory role for declarative memory in neurodevelopmental disorders. *Neuroscience & Biobehavioral Reviews*, 51, 205–222.
<https://doi.org/10.1016/J.NEUBIOREV.2015.01.008>
- Waite-Stupiansky, S. (2022). Jean Piaget's constructivist theory of learning. *Theories of Early Childhood Education: Developmental, Behaviorist, and Critical*, 3–18.
<https://doi.org/10.4324/9781003288077-2>
- Ware, P., Liaw, M.-L., & Warschauer, M. (2012). The use of digital media in teaching English as an international language. In *Principles and Practices for Teaching English as an International Language* (1st Edition). Routledge.
- Webster, R. (2016). Declarative knowledge acquisition in immersive virtual learning environments. *Interactive Learning Environments*, 24(6), 1319–1333.
<https://doi.org/10.1080/10494820.2014.994533>
- Yang, Y., Wannaruk, A., & Lian, A.-P. (2017). Improving the English-speaking skills of Chinese primary EFL learners with a verbotonal approach. *Rangsit Journal of Arts and Sciences*, 7(2), 141–156. Retrieved from <https://ph04.tci-thaijo.org/index.php/JCST/article/view/499>

CONFLICT OF INTEREST STATEMENT:

There were no conflicts of interest. All authors contributed to the study's conception and design.

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