

DIGITAL MULTIMODAL COMPOSING IN EFL PRE-SERVICE TEACHERS' SLIDES: A SYSTEMIC FUNCTIONAL MULTIMODAL DISCOURSE ANALYSIS

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Abstract

Presentation slides are highly incorporated in the classroom. However, the EFL pre-service teachers' ability to compose meaning across different modes in presentation slides remains underexplored. This study investigates how a group of four EFL pre-service teachers designed presentation slides by analysing the visual, verbal, and gestural modes through the lens of Systemic Functional Multimodal Discourse Analysis (SFMDA). The research aims to examine how ideational, interpersonal, and textual meanings are realised in the multimodal artefacts, students' design rationale, and how the three modes unite to achieve pedagogical goals, i.e. intersemiosis. The data included 15 presentation slides and an interview transcript, which provided insight into the EFL pre-service teachers' design rationale. Findings indicate that although the slides employed the three modes, the analysis found limited intersemiosis, with modes, particularly the visual mode, not co-constructing meaning. This reflects a gap between the designers' intention to engage students and the actual execution. The study concludes that pre-service teachers require not only theoretical exposure to multimodality but also structured practice in designing materials where meaning is distributed meaningfully across modes. These findings highlight the need for teacher education to develop curriculum that explicitly scaffolds digital multimodal composing skills.

Keywords: *digital multimodal composing; EFL pre-service teacher; intersemiosis; multimodality; presentation slides; systemic functional multimodal discourse analysis*

1. Introduction

The practice of teaching and learning English as a Foreign Language (EFL) has significantly transformed as a way to adapt to today's globalised world and students' needs. The contemporary EFL classrooms have recognised that students must possess the ability to communicate using diverse modes, such as languages, images, gestures, colours, and other non-verbal resources, to safely navigate today's digital landscape (Bock, 2016; Cope & Kalantzis, 2000; Danielsson & Selander, 2021; Jewitt, 2007; Cope & Kalantzis, 2021 in Lim et al., 2022). As a result, EFL teaching and learning have increasingly incorporated multimodal

digital media, extending classroom communication beyond traditional print-based text (LeFebvre et al., 2022). One common manifestation of this modern way of teaching is the widespread use of presentation slides as an instructional tool (Nisa, Dambaresya & Fauziah, 2021; Shin, Cimasko, & Yi, 2020; Soraya, 2022; Widyaningrum et al., 2024; Yunus et al., 2022; Zhao, Djonov & van Leeuwen, 2014a).

In academic settings, presentation slides have become a standard medium for delivering instructional content in classrooms and conferences (Zayapragassarazan & Mohapatra, 2021). Presentation tools such as Microsoft PowerPoint, Google Slides, Canva, and Prezi offer unique features that enable presenters to integrate text, images, sounds, animations, and videos. The effective combination of these modes can potentially enhance clarity, engagement, and interactivity in delivering a lecture (Chen, 2021; LeFebvre et al., 2022; León & García-Martínez, 2021; Zhao, Djonov & van Leeuwen, 2014b; Zhao & van Leeuwen, 2014a). Therefore, to obtain these benefits, pre-service teachers must develop the ability to design slides that integrate various semiotic resources effectively (henceforth digital multimodal composing) (Dai & Wu, 2021; Hung, Chiu & Yeh, 2012; Zhang, Akoto, & Li, 2021).

Although the use of presentation slides in education is not a new phenomenon, research suggests that many students and educators struggle to utilise multimodal resources effectively. Rather than utilising the full range of available modes, they tend to rely excessively on text-heavy slides and static images, neglecting other elements such as audio, video, spatial arrangement, and interactive features (Chen, 2021; Nisa, Dambaresya, & Fauziah, 2021; Singh, Leong & Vijayarajoo, 2024). This over-reliance on dense textual content can lead to overcrowded and disorganised slides, which in turn contribute to cognitive overload, disengagement, and reduced information retention (Castelló, Chavez, & Cladellas, 2020; Zayapragassarazan & Mohapatra, 2021). These findings highlight the urgent need to investigate more instances of designing presentation slides, particularly in higher education, to quickly detect and fix the issues regarding pre-service teachers' digital multimodal composing.

Given this shortfall in research, this study aims to analyse how EFL pre-service teachers orchestrate visual, verbal, and gestural modes in designing presentation slides through the lens of Systemic Functional Multimodal Discourse Analysis (SF-MDA). Although previous studies have explored presentation slides in various contexts using SF-MDA (see Lindenberg, 2023; Nisa, Dambaresya & Fauziah, 2021; Soraya, 2022; Zheng, 2019), few focus on the triadic interaction between visual, verbal, and gestural modes in presentation slides created by pre-service teachers. Additionally, not only does this paper investigate the emergent meaning carried out by each mode, but also how these three different modes collaborate to communicate a strong, unified meaning (henceforth intersemiosis) (Lim, 2019; Lindenberg, 2022; Liu & O'Halloran, 2009). Furthermore, in order to provide a more contextualised interpretation of meanings, this study also accounts for the design rationale from the students' perspectives. The findings of this paper can reflect the EFL pre-service teachers' capability of designing presentation slides and inform the teacher education programmes about how to design training programmes that can shape the future educators to become proficient multimodal teaching media designers.

2. Literature Review

2.1 Systemic Functional Multimodal Discourse Analysis

One approach to breaking down multimodal text is Systemic Functional Multimodal Discourse Analysis (SF-MDA), which is informed by Halliday's Systemic Functional Theory (SFT) (Jewitt et al., 2016; O'Halloran, 2008). Systemic Functional Theory examines how semiotic resources combine to create meaning and achieve a larger social purpose within a specific context, such as teaching a concept, persuading people to buy a product, and so on.

To understand the meaning and function of semiotic resources, SF-MDA adopts SFT's metafunctional principles, which include three strands of meanings, namely ideational, interpersonal, and textual meanings (Jewitt et al., 2016; O'Halloran, 2008). The ideational meaning realises how semiotic resources can construct human experiences of the world. The interpersonal meaning informs how people build relationships with each other. The textual meaning deals with how the ideational and interpersonal meanings are organised cohesively and coherently in a text. When the EFL pre-service teachers designed their slides, they made choices regarding what to write, which colour, image, and layout to use, etc. Therefore, employing metafunctional principles can assist in understanding what these semiotic resources do and what social purposes the students aim to achieve.

2.2 Applications of SF-MDA in Language Education

SF-MDA has been utilised to carry out investigations in the three strands of multimodal research: the process of making meaning in the classroom, learners' multimodal composing, and multimodal analysis of language educational materials (Chen, Weninger, & Lim, 2024). This paper is situated in the second and third strands of multimodal research, as it assessed how the participants, who were pre-service teachers studying in the sixth semester of university, communicated their knowledge and learning experience in a multimodal teaching material, i.e. presentation slides.

While numerous studies have been conducted in the previously mentioned strands (see Ghoushchi et al., 2021; Lim, 2019; Lindenberg, 2022; Nisa, Dambaresya & Fauziah, 2021; Qi, 2023; Rafelina & Hermawan, 2022; Shin, Cimasko, & Yi, 2020; Soraya, 2022; Zheng, 2019), by limiting the investigation on one metafunction or covering only visual and verbal modes, they present a notable gap to be addressed. Moreover, past studies employing SF-MDA as the theoretical framework has tended to focus more on the artefact analysis and emphasise less of students' motivation on designing their multimodal texts because SF-MDA often centres on the 'systemic choice of meaning making' (Chen, Weninger, & Lim, 2024). This approach has drawn criticism for SF-MDA's perceived rigidity in assigning meanings to semiotic resources (Jewitt, Bezemer, & O'Halloran, 2016).

By adapting metafunction-based theoretical frameworks raised by previous studies and implementing them to a wider combination of modes, this study can offer a more complex empirical approach to analysing multimodal texts using SF-MDA. Furthermore, to address criticism regarding the rigidity of SF-MDA, this study also accounts for an exploration of why students choose certain semiotic resources to convey information in the hope of presenting a more contextual meaning interpretation.

2.3 EFL Pre-Service Teachers' Digital Multimodal Composing (DMC) of Presentation Slides

In today's increasingly digitised educational environments, pre-service teachers are expected to develop digital multimodal composing (DMC) skills, which encompasses the ability to strategically integrate multiple semiotic modes using digital tools to create purposeful texts (Dai & Wu, 2021; Hafner & Ho, 2020; Zhang, Akoto, & Li, 2021). Among the many forms of digital tools, presentation slides are arguably the most widely used in EFL classrooms. Consequently, the ability to design pedagogically effective multimodal slides has become a critical competency for future educators since it does not only reflect teachers' digital fluency but also demonstrates multimodal literacy and pedagogical awareness (Chen, 2021; Dai & Wu, 2021).

Although a growing body of research has explored EFL pre-service teachers' use of digital tools for composing slides, many of these studies concentrate primarily on students' self-reported experiences, reflections, and challenges in using specific platforms (e.g., Humairoh et al., 2024; Limbong & Wadham, 2024; Syamdianita & Cahyono, 2021; Tour & Barnes, 2020; Uzun & Kilis, 2019; Widyaningrum et al., 2024). While these insights are valuable in revealing students' perceptions, they often fall short in analysing how specific design elements contribute (or fail to contribute) to achieve pedagogical goals. In other words, the focus tends to be on the designer's perspective, without critically examining the designed product itself using a clear theoretical framework.

Moreover, few studies combine a systematic artefact analysis with an exploration of the design rationale behind the choices, particularly in the context of slide-based teaching materials. This gap is significant, as it limits our understanding of how EFL pre-service teachers' utilise semiotic resources to realise their goals in teaching. Given the increasing reliance on multimodal tools in EFL classrooms, this gap is especially important. Addressing it can provide more actionable insights for teacher education programs aiming to prepare future teachers not just as digital users, but as intentional designers of multimodal pedagogic content. In response, the present study aims to contribute to this underexplored area by investigating how multimodal meanings are constructed in EFL pre-service teachers' presentation slides and why specific design decisions were made during the composing process.

3. Research Method

This study is nested in a case study design and aims at investigating the creation of multimodal presentation slides by the sixth-semester English Language Education students, covering three aspects: 1) meanings emerging from the slides, 2) students' design rationale, and 3) the intersemiosis of modes. Focusing on this specific case, the study's purpose is to provide an in-depth, contextual examination of how these EFL pre-service teachers orchestrate visual, verbal, and gestural modes in their slides.

The participants were four sixth-semester students, Satria, Dwi, Aulia, and Dodi (pseudonyms), who enrolled in a Multimodal and Digital Literacy course at a university in West Java, Indonesia. Throughout the semester, they engaged with foundational concepts of multimodal pedagogy, explored theoretical frameworks such as SF-MDA and Social Semiotics, and practised designing digital teaching materials. Additionally, the participants had completed their teaching practicum in the previous semester, which equipped them with practical experience in designing teaching media for real classroom contexts. As third-year students, they had already developed a solid foundation in both pedagogical principles

and the use of digital tools for creating multimodal teaching materials. For these reasons, they were considered well-suited to participate in this study.

As part of their final project, the students worked collaboratively to create a set of multimodal slides based on a lesson plan provided by the lecturer. The lesson aimed to teach report texts to 11th-grade students, and while the topic of the report was left to the group's discussion, they were only required to design the slides, not to present them. Therefore, the analysis focused exclusively on the visual, verbal, and gestural elements displayed on the slides.

The data for this study included the students' presentation slides and a transcript from a group interview. Both were collected after obtaining written consent from the participants. The group voluntarily submitted a total of 15 slides, which were used as the main artefacts for analysis. An initial review was conducted to address any formatting or content inconsistencies, followed by a detailed analysis of how each mode, i.e. visual, verbal, and gestural, contributed to meaning-making through ideational, interpersonal, and textual functions.

The analysis of visual, verbal, and gestural modes in this study was guided by Halliday's metafunctional framework (Halliday & Matthiessen, 2014), which identifies three simultaneous strands of meaning: ideational (representing experience), interpersonal (enacting relationships), and textual (organising discourse). Visual elements were interpreted using Kress and van Leeuwen's (2021) Visual Grammar, verbal texts through Systemic Functional Grammar (SFG), and gestures using Lim's (2017) metafunction-based model. Each mode was analysed to understand how meaning was constructed, relationships enacted, and content organized within the presentation slides. The summary of the analytical framework can be viewed in Table 1 below.

Table 1

Multimodal Analytical Framework Summary

Mode	Framework used	Focus areas
Visual	Visual Grammar (Kress & van Leeuwen, 2021)	- Representational (Narrative, Conceptual) - Interactive (Gaze, Distance, Angle) - Compositional (Layout, Framing, Salience)
Verbal	Systemic Functional Grammar (Eggins, 2004; Emilia, 2014; Halliday & Matthiessen, 2014)	- Transitivity (Process Types) - Mood (Declarative, Interrogative, Imperative) - Theme-Rheme
Gestural	Lim (2017), Martinec (2000, 2001, 2004), and Hood (2011)	- Types (Presenting, Representing, Indexical) - Attitude & Engagement - Rhythm, Direction, and Timing

Recognising the central role of intersemiosis in SF-MDA, the study also explored how visual, verbal, and gestural modes work together to produce a unified message. Effective intersemiosis has been shown to support learner comprehension in pedagogical contexts (Pi et al., 2021, in Lindenberg, 2023). To explore these relations, Lim's (2019) framework was used to distinguish between co-contextualising relations (when modes align and converge in meaning) and re-contextualising relations (when modes diverge or appear dissonant). For Intersemiotic Cohesion, building on Liu and O'Halloran's (2009) work, Lim (2019) extended two key concepts: Intersemiotic Parallelism, which occurs when different modes share a

similar form or structure, and Intersemiotic Polysemy, where one mode highlights distinct, related meanings of another mode.

Following the slide analysis, three out of four members participated in a semi-structured online interview. The interview guide was adapted from Smith, Amgott, and Malova's (2021) study on students' multimodal design processes in podcast production. The original instrument proved highly adaptable for this context, as it helped elicit participants' reasoning behind design choices. Questions included prompts such as "*Kenapa pilih template ini?*" ("Why did you choose this template?") and "*Gambar ini maknanya apa?*" ("What does this image symbolise?"). Conducted in Indonesian, the interview lasted approximately 40 minutes and was later transcribed and translated into English before being analysed thematically.

Additionally, the interview transcript was analysed thematically following Braun and Clarke's (2006) six steps of thematic analysis, as well as guidance from Lochmiller (2021), using the online platform Taguette. After carefully reading and summarising the data, the researchers generated initial codes that captured the participants' thoughts and experiences related to designing the slides. These codes were then examined for recurring patterns, similarities, and connections, which informed the development of overarching themes. Once the themes were refined through a rigorous review process, the researchers proceeded to the writing stage. This involved describing each theme, illustrating them with excerpts from the transcript, linking them to relevant literature, and discussing their broader implications for the study's findings.

4. Results and Discussion

4.1 Modes in the EFL Students' Presentation Slides

An analysis of the 15 slides revealed that the majority (7 out of 15) combined verbal (text) and visual modes (caption boxes, image, and decorative elements like plants, stationery, and geometric shapes). Apart from the caption boxes, the visual elements were generally placed in the corners of the slides and served a decorative rather than educational role. Only one slide employed animated gesture (i.e., an index finger pointing at an image, signifying a clicking gesture), indicating limited use of the gestural mode. Table 2 illustrates the distribution of modes across the slides.

Table 2

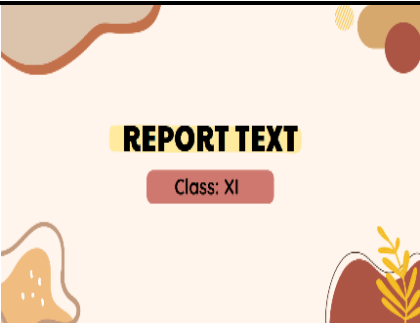
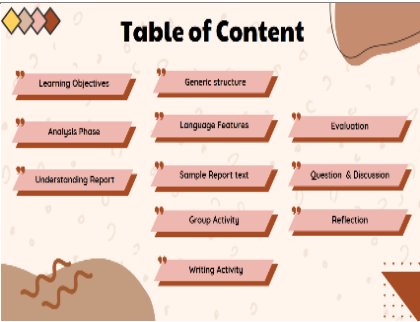
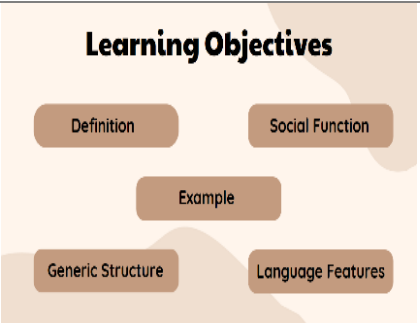
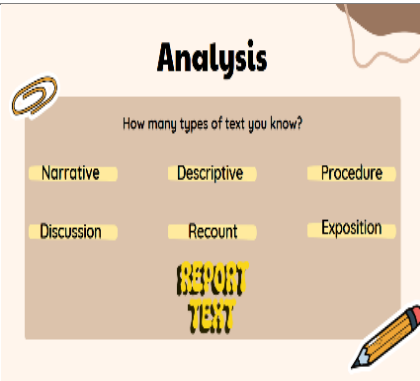
Distribution of Modes Across Students' Presentation Slides

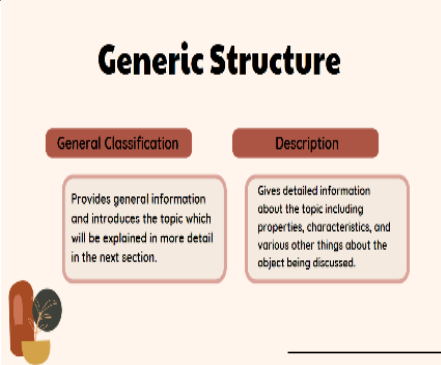
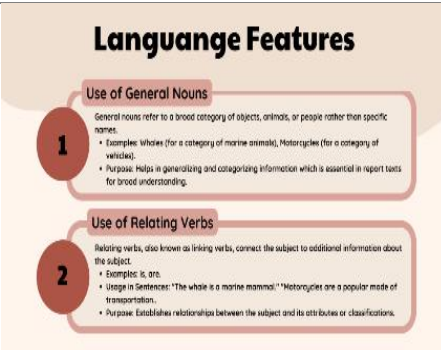
Types of slides	Number of slides
Text + caption box	5
Text + caption box + decorative elements (e.g. geometric shape, plant, stationery)	7
Text + caption box + decorative elements (e.g. plant) + animation (i.e. mouse clicking gesture)	1
Text + caption box + decorative elements (e.g. geometric shape, symbols) + animation (i.e. finger clicking gesture) + image	1
Text + decorative elements (e.g. geometric shape, plant, stationery)	1
Total	15

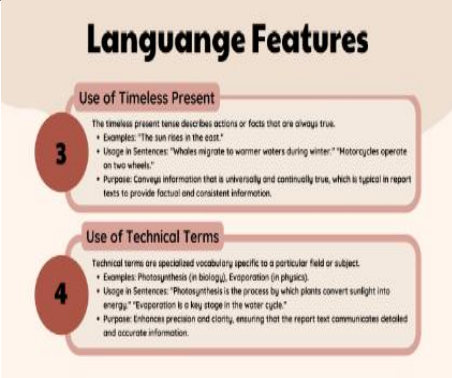
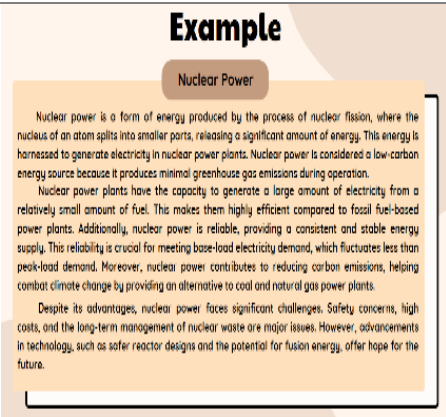
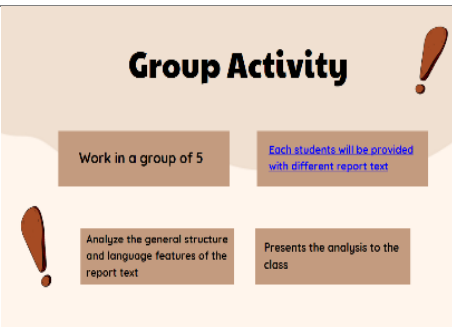
After mapping all the available modes, the multimodal artefacts were then carefully inspected through the lens of SF-MDA, focusing on ideational, interpersonal, and textual meanings. Table 3 below shows the visual, verbal, and gestural data analysis.

Table 3

Multimodal Analysis of Students' Slides of the Visual, Verbal, and Gestural Modes

No	Slide	Metafunction	Visual	Verbal	Gestural
1		Ideational Interpersonal Textual	Conceptual analytical Offer, medium distance, frontal view Centred, text with high salience	Unanalysed Unanalysed Unanalysed	None None None
2		Ideational Interpersonal Textual	Conceptual analytical Offer, far distance, frontal view Given-Real, segregation, text with high salience	Unanalysed Unanalysed Unanalysed	None None None
3		Ideational Interpersonal Textual	Conceptual analytical Offer, medium distance, frontal view Given-Real, segregation, text with high salience	Unanalysed Unanalysed Unanalysed	None None None
4		Ideational Interpersonal Textual	Conceptual classificational Offer, far distance, frontal view Given-Real, segregation, text with high salience	1 mental pr, clause simplex 1 interrogative clause 1 topical theme (unmarked)	None None None

5		Ideational	Conceptual analytical	3 material pr, 1 hypotactic elaboration, 1 clause simplex	None
		Interpersonal	Offer, medium distance, frontal view	3 declarative clauses	None
		Textual	Given-Real, segregation, text with high salience	2 topical themes (unmarked), 1 topical theme (marked)	None
6		Ideational	Conceptual analytical	3 material pr, 1 verbal pr, 1 paratactic extension, 1 hypotactic elaboration, 1 clause simplex	None
		Interpersonal	Offer, medium distance, frontal view	4 declarative clauses	None
		Textual	Given-Real, segregation, text with high salience	4 topical themes (marked)	None
7		Ideational	Conceptual analytical	4 material pr, 3 relational attributive intensive pr, 1 mental pr, 4 clause simplex, 3 hypotactic elaboration	None
		Interpersonal	Offer, medium distance, frontal view	6 declarative clauses	None
		Textual	Given-Real, segregation, text with high salience	4 topical themes (unmarked), 3 topical themes (marked), 1 textual theme	None

8		Ideational	Conceptual analytical	10 material pr, 6 relational attributive intensive pr, 5 clause simplex, 4 hypotactic elaboration, 2 hypotactic enhancement	None
		Interpersonal	Offer, medium distance, frontal view	16 declarative clauses	None
		Textual	Given-Real, segregation, text with high salience	9 topical themes (unmarked), 1 topical theme (marked), 5 textual themes	None
9		Ideational	Conceptual analytical	13 material pr, 4 relational attributive intensive pr, 1 relational identifying possessive pr, 1 mental cognitive pr, 4 clause simplex, 2 hypotactic elaboration, 5 hypotactic enhancement, 1 paratactic extension	None
		Interpersonal	Offer, far distance, frontal view	19 declarative clauses	None
		Textual	Given-Real, segregation, text with high salience	13 topical themes (unmarked), 4 topical themes (marked), 6 textual themes	None
10		Ideational	Conceptual analytical	4 material pr, 4 clause simplex	None
		Interpersonal	Offer, medium distance, frontal view	3 imperative clauses, 1 declarative clause	None
		Textual	Given-Real, segregation, text with high salience	3 topical themes (marked), 1 topical theme (unmarked)	None

11		Ideational	Conceptual analytical	6 material pr, 3 paratactic extension	None
		Interpersonal	Offer, far distance, frontal view	6 imperative clauses	None
		Textual	Given-Real, segregation, text with high salience	6 topical themes (marked)	None
12		Ideational	Conceptual analytical	1 material pr, 1 clause simplex	None
		Interpersonal	Offer, medium distance, frontal view	1 imperative clause	None
		Textual	Centred, segregation, text with high salience	1 topical theme (marked)	None
13		Ideational	Conceptual analytical	1 mental cognitive pr, 1 material pr, 2 clause simplex	Representing action
		Interpersonal	Offer, medium distance, frontal view	2 imperative clauses	Prone (palm down) position
		Textual	Centred, segregation, text with high salience	2 topical themes (marked)	Small, rhythmic gesture pointing at the icon
14		Ideational	Conceptual analytical	1 relational identifying possessive pr, 1 clause simplex	None
		Interpersonal	Offer, medium distance, frontal view	1 interrogative clause	None
		Textual	Centred, segregation, text with high salience	Implicit theme, only rheme is shown	None

15		Ideational	Conceptual analytical	Unanalysed	None
		Interpersonal	Offer, medium distance, frontal view	Unanalysed	None
		Textual	Centred, text with high salience	Unanalysed	None

4.1.1 Visual Mode Analysis

Firstly, in terms of ideational meaning, the visuals overwhelmingly featured Conceptual Analytical structures, observed in 14 out of 15 slides. This indicates that images were predominantly used to dissect concepts and present them 'as is' (Kress & van Leeuwen, 2021), rather than to illustrate dynamic processes, which are found in narrative structures. For example, instead of depicting the 'process' of writing report texts through sequential visuals, the slides presented the general definition, generic structure, language features, and examples statically (Slides 5-9). The rare instance of a Conceptual Classificational structure (Slide 4) further highlighted a limited use of visuals for categorising information. The prevalence of static, analytical visuals may have constrained the potential for engaging students experientially, as narrative representations can often provide more dynamic and immersive constructions of knowledge (Kress & van Leeuwen, 2021).

Secondly, regarding the interpersonal meaning, a consistent pattern across all slides was that the visuals functioned as an "offer," prominently lacking direct eye contact from any represented participants (Kress & van Leeuwen, 2021). Visual information was frequently presented in medium shots with spacious blank areas surrounding it, and coupled with the consistent use of a frontal view (characteristic of objective images), this conveyed a detached and impersonal stance (Kress & van Leeuwen, 2021). Consequently, this approach might have reduced the sense of direct address and active involvement from students, which misaligned with the group's pedagogical goal of fostering strong student engagement.

Lastly, for textual meaning, the visual mode primarily organised information using the Ideal-Real structure (10 instances) (Kress & van Leeuwen, 2021). In this configuration, overarching concepts (e.g. "Understanding Report Texts," "Generic Structure," "Language Features") were presented in the upper, "ideal" position, with supporting details or practical applications in the lower, "real" section. A centred structure (Kress & van Leeuwen, 2021), observed in 5 slides, further drew attention to the most important information placed at the core of the layout. In conjunction with explicit "Framing" devices, such as the strategic use of text boxes to segregate and highlight information, and elements with "high salience," the visual mode contributed significantly to the overall coherence and cohesion of information, effectively guiding the viewer's attention and establishing a clear way of navigating information.

4.1.2 Verbal Mode Analysis

The investigation into the verbal mode revealed its predominant role as the primary carrier of information on the slides, establishing both content and interaction. Upon

analysing the clauses, it was found that material processes (47 instances) and relational attributive intensive processes (12 instances), alongside identifying relational processes (2 instances), were the main vessels for carrying information. Material processes describe actions and events (Eggins, 2004; Emilia, 2014; Halliday & Matthiessen, 2014), reflecting a clear focus on actions students are expected to perform (e.g., instructions for writing or reflection) and events being described within the report text content. Relational processes, particularly attributive ones, were crucial for defining and describing entities (Eggins, 2004; Emilia, 2014; Halliday & Matthiessen, 2014), thus scaffolding knowledge construction by establishing clear relationships between concepts, particularly when giving examples of report texts (e.g., "Motorcycles are a popular mode of transportation"). Conversely, the rarity of mental processes (4 instances) and verbal processes (1 instance) (Eggins, 2004; Emilia, 2014; Halliday & Matthiessen, 2014) suggests less emphasis on construing internal thoughts, perceptions, or direct quoted speech within the presented content.

Regarding the logical meanings, a strong reliance on hypotaxis (16 elaborations, 7 enhancement) and clause simplex (20 instances) appeared, indicating that information was frequently expanded through dependent clauses that elaborate or enhance meaning, or presented in simple, direct statements. The less frequent use of parataxis (7 extension) suggests a preference for subordinating rather than coordinating independent verbal ideas. Notably, most of the time, the extensive use of complex and compound sentences resulted in wordy slides, particularly evident on the 'Example' slide. This particular approach is not considered suitable considering slides that are overwhelmingly filled with information could potentially cause cognitive overload for learners (Castelló, Chavez, & Cladellas, 2020; Uzun & Kilis, 2019; Wolfe et al., 2024). The sentences on the slides should remain concise and straightforward, with only displaying phrases or short, simple sentences that can be elaborated orally by the teacher (Castelló, Chavez, & Cladellas, 2020; Gordani & Yahya, 2019). Therefore, for the input stage, the pre-service teachers could use other methods, such as displaying a video or distributing a worksheet in order to reduce the load of information.

Interpersonally, declarative moods (Eggins, 2004; Emilia, 2014; Halliday & Matthiessen, 2014) were largely employed (50 instances) for explaining the subject matter (e.g., defining report text). This frequent use of declarative statements positioned the teacher as the primary source of information, therefore shifting the focus from students to teacher as the centre of the learning process. However, imperative clauses (12 instances) (Eggins, 2004; Emilia, 2014; Halliday & Matthiessen, 2014) were strategically employed for giving direct instructions (e.g., "Reflect yourself," "Click me!"). This choice of mood positioned the pre-service teachers in a more authoritative stance, directly commanding the audience's actions. The rareness of interrogative moods (1 instance) further indicates a predominantly one-way flow of information, rather than fostering interactive dialogue. This approach suggests that the pre-service teachers were still heavily influenced by the traditional lecturing style that prioritises content delivery over provoking and exchanging students' thoughts.

For textual meaning, the verbal mode primarily relied on topical themes to organise information. A high number of unmarked topical themes (31 instances), which placed the subject at the beginning of the clause (Eggins, 2004; Emilia, 2014; Halliday & Matthiessen,

2014), ensured a straightforward and predictable presentation of content. Marked topical themes (25 instances) also occurred frequently, foregrounding specific elements for emphasis. The presence of conjunctions as textual themes (18 instances) contributed to the cohesion and flow of the verbal discourse, logically linking clauses and ideas. The overall Theme-Rheme structure ensured a clear progression of information, guiding the learners through the material in a coherent sequence (Eggins, 2004; Emilia, 2014; Halliday & Matthiessen, 2014).

4.1.3 Gestural Mode Analysis

The gestural mode was strikingly limited, observed in only one instance of Representing Actions (Slide 13). This was specifically identified as "clicking gesture", which directly embodied the physical action of clicking on a Padlet icon, amplifying the message carried by the verbal mode, "Click me!" (see Figure 2). This suggests that the gestural mode primarily functioned to direct physical interaction with the slides' element, rather than to visually represent complex ideas, abstract concepts, or a broader range of experiential meanings (Lim, 2017). This finding implies a narrow utilisation of gesture's potential for knowledge construction, focusing on literal actions rather than conceptual representations.

Figure 2

Padlet icon and clicking animation on the 'Reflection' slide



Interpersonally, the animated index finger involved a prone (palm down) position to give instructions (Slide 13). This gestural orientation, particularly when associated with a pointing action, inherently carried an authoritative and directive stance of the teachers (Lim, 2017). By visually demanding a specific action from the students (i.e. clicking the Padlet icon), this gestural choice aligned with and subtly reinforced the verbal command (i.e. "Click me!").

Textually, the gestural mode was realised through specific physical cues that aided information organisation. The small, repetitive gesture pointing at the Padlet icon using the index finger served a direct textual function by visually highlighting the key interactive element on the slide. It directed the students' attention to a specific point of interaction and effectively demanded engagement (Lim, 2017).

4.2 Design Rationale

The interview data provided crucial insights into the pre-service teachers' reasoning behind their slide design choices, revealing two emerging, interconnected themes: 1) a student-centred design philosophy, and 2) unintentional design, particularly regarding multimodal integration.

4.2.1 Student-Centred Design Philosophy

A key finding from the interviews was the pre-service teachers' focus on audience engagement as a primary goal for their slide design. This aim profoundly influenced their selection of the slide template and some design elements. The group member, Satria, elaborated on the group's rationale for choosing the slide template:

Satria: "One of our considerations was to find something that looked interesting, something eye-catching, so that maybe the students wouldn't lose their attention too easily."

Similarly, Dwi echoed the statement:

"If I'm not mistaken, at that time we just wanted something simple. The colours weren't too striking either. But still, the elements (of the template) were plenty enough to attract the students' attention. But not too crowded either."

These statements collectively demonstrate a clear awareness of their target audience, 11th-grade EFL students, and a pedagogical goal to place students at the centre of the learning process. The group prioritised a 'simple' yet 'interesting' and 'eye-catching' design and chose a template with warm, earth-tone palettes (e.g., shades of brown, yellow, and dark red) and rounded decorative elements. According to Narayanan et al. (2025), such visuals could potentially stimulate positive emotions and foster a more welcoming learning environment for students, aligning well with the group's aim of prompting students' active participation. Moreover, this focus further highlights a good grasp of the interpersonal function of visual design (Kress & van Leeuwen, 2021), recognising how visuals can draw attention and therefore establish a relationship with the students.

Beyond the aesthetic choices, the pre-service teachers also incorporated explicit strategies within the slides to foster student engagement and connect with their prior knowledge. For instance, as a lead-in to the topic of report texts, one slide posed a direct question to students: "How many types of text do you know?" Satria explained this verbal strategic choice:

"This is, like, me testing the kids, 'Kids, how many types of text do you know?' 'Oh, there's this text, that text.' 'Okay, today we're going to discuss report text.' That's why the 'report text' font is different."

Placing students at the centre of the learning process by encouraging engagement through questioning, reflection, and the creation of report texts, constitutes an effective pedagogical strategy. When learners take responsibility for their own learning and actively evaluate their progress, they can develop creativity and critical thinking skills (Demir, 2024; Ghafar, 2023; Pastini & Lilasari, 2023; Tang, 2023). Such competencies are crucial for navigating the complexities of information in this rapidly evolving world, fostering lifelong learning, and eventually contributing as informed citizens (Ghafar, 2023).

However, unfortunately, this design philosophy was not thoroughly communicated in the actual multimodal orchestration. The following subsection will explore this theme further.

4.2.2 Unintentional Design

Although the pre-service teachers expressed student-centred design as the goal, their actual multimodal composing practices often revealed a lack of careful adjustment and intentionality. The group's slides contained several typographical and phrasing errors. One such instance became evident during the interview when the researcher asked a participant, Dodi, about a particular wording choice on the "Generic Structure" slide. The exchange unfolded as follows:

Researcher: "Dodi, in the Generic Structure slide, you wrote, 'General classification provides general information and introduces the topic *which will be explained in more detail in the next section.*' Could you clarify what you meant by this part? Which topic are you referring to?"

Dodi: "Oh, it was only supposed to be '...introduces the topic.' I didn't realise I had made a mistake."

Combined with other instances of typographical errors which could be viewed on the slides, Dodi's response suggests that the slide was not carefully reviewed before submission.

Furthermore, when asked about their rationales behind specific design elements, participants frequently admitted that they "just followed the template" and hesitated to make further changes, often because they felt unsure of what to add. This reliance on a pre-existing template, rather than purposeful customisation, clearly indicates a gap in their multimodal composing skills. Dwi's explanation about the 'Evaluation' slide offers a clear example of this reliance:

"If I remember correctly, this was what's left from the template. But it was more like... Yeah, I just wanted to highlight this evaluation section. If I added more, I'd get confused about what else to add, so I just made the 'evaluation' text bigger. So everyone can see it clearly. And the parts below are also from the template, but coincidentally, that template was just better."

This reflection demonstrates how design decisions were often driven by convenience rather than pedagogical intent. Superficial changes, such as enlarging text, were made not to enhance meaning, but simply to make content more noticeable. Dwi's remark, "I was confused about what else to add," points to a limited design repertoire and a reliance on template defaults that hindered deeper multimodal expression.

A similar pattern emerged in the design of the 'Reflection' slide, which included a Padlet hyperlink (see Figure 2). When clicked, this link directed students to a Padlet page containing four reflective questions: 1) "What have you learned?" 2) "What have you not understood yet?" 3) "Do you think the material is useful?" 4) "Is there anything that can be improved in our activities?"

The inclusion of a hyperlink raised questions about audience interaction. The slides were originally designed to be projected in front of the class, yet hyperlinks require direct interaction through students' individual devices. When asked about this inconsistency, the EFL pre-service teachers acknowledged that they had not fully considered the delivery context. However, they explained that they planned to distribute the Padlet link to students for individual reflection. The exchange below captures this reasoning:

Researcher: "But this method requires clicking. If it's displayed in class, it would be more common to use a QR code. Why did you choose the hyperlink method instead of a QR code?"

Satria: "I guess we didn't really think about the QR [laughs]."

Researcher: "So, how are the students supposed to access it?"

Satria: "The link will be sent to them."

This dialogue underscores a broader issue: a lack of strategic thinking around the affordances of digital tools and how they align with specific classroom contexts. Although the group eventually addressed the practical concern, the initial oversight points to limited multimodal orchestration, particularly in designing for actual classroom interactivity and user experience.

This tendency to rely on templates, paired with an absence of thorough consideration, had a significant impact on the pre-service teachers' agency as designers. Previous studies reported how digital tools often empower learners to exercise greater control over meaning-making (see Dahlström, 2021; Lim & Nguyen, 2022; Magnusson & Godhe, 2019; Marissa & Hamid, 2022; Veum, Siljan, & Maagerø, 2021). However, the findings in this study suggest a more complex reality. The students did make some autonomous choices, such as selecting the template and inserting certain decorative elements, but their frequent justification of "just following the template" reveals a constrained form of agency. The ease and familiarity of templates appeared to discourage more critical and purposeful semiotic decision-making.

This aligns with existing scholarship suggesting that digital fluency alone does not guarantee effective multimodal communication. Without a deeper understanding of semiotic affordances and how to orchestrate them strategically, even proficient users of technology may fall back on surface-level design choices (Tour & Barnes, 2020). In this case, the templates not only shaped the visual layout but also limited the pre-service teachers' capacity to engage in more intentional, pedagogically grounded design work.

Ultimately, this lack of intentionality directly affected the intersemiosis across modes in the presentation slides. Visual elements often fail to complement or reinforce verbal and gestural modes, resulting in a dissonant rather than cohesive multimodal message. The following section will explore specific instances of this limited intersemiosis and its implications for the students' overall multimodal competence.

4.3 Intersemiosis of Visual, Verbal, and Gestural Modes

Analysis of the entire presentation slides revealed inconsistent intersemiosis across the visual, verbal, and gestural modes. The verbal mode consistently carried the main information, explicitly stating definition, features, and examples of report texts and giving commands like 'Click me!' and 'Reflect yourself!'. The gesture of clicking, which only appeared on the 'Reflection' slide, seemed to amplify the verbal instruction, particularly the 'Click me!' command. This shows a co-contextualising relation, where the meanings align in a convergence (Lim, 2019). Regarding the intersemiotic cohesion, the verbal and gestural modes showed Intersemiotic Parallelism (Lim, 2019) by sharing the same message, which is instructing the students to click the Padlet image and complete a self-reflection task (Liu & O'Halloran, 2009).

However, a significant re-contextualising relation (Lim, 2019) emerged between the visual mode and the verbal/gestural modes. Despite assisting in the placement, segregation, and salience of information to draw students' attention, the visual mode contributed little to the theme of reflection or to the broader lesson topic, which was meant to introduce report texts. The slide predominantly employed conceptual analytical structures, yet it lacked symbolic visuals, diagrams, or meaningful vectors that could support the abstract concepts of reflecting or report writing, therefore failing to fully align with the pre-service teachers' pedagogical goal of engaging students in deeper learning processes.

Although this student-centred design philosophy is highly crucial and relevant, their intention was not thoroughly communicated through the visual design. The group's goal was simply to introduce general information about report texts rather than explore real-life examples. This disconnection stemmed partly from the teachers' decision not to anchor the lesson in a specific topic, opting to introduce the general structure of report texts. Satria explained:

"We just searched on Google, you know, looking for junior high learning outcomes, and then we picked report text. So, we presented the report text. It wasn't like it had to be about a specific theme. Even though it should have been, we weren't really aware at the time, so there was no theme."

Consequently, the visuals remained generic and minimally contextualised. The pre-service teachers missed the opportunity of choosing visual elements that could better align with their teaching aim; for instance, they could portray human characters with gaze and a high degree of involvement, which could change the shift from 'offering' information to 'demanding' interaction from students (Kress & van Leeuwen, 2021).

This phenomenon highlights a common struggle encountered by multimodal composers, which is the integration of meaning across modes. Being an avid user of digital tools does not guarantee that pre-service teachers can communicate meanings effectively through multimodal texts (Jones et al., 2020; Tour & Barnes, 2020) because in order to do so, they need to have a good grasp on multimodal affordances and multimodal orchestration (Hafner & Ho, 2020). The pre-service teachers should understand that different modes (verbal, visual, gestural, auditory, and spatial) carry different potential for meaning-making (henceforth affordances) and therefore, contribute differently to the multimodal composing (Hafner & Ho, 2020). Furthermore, different modes can be 'strategically combined' to adhere to the text's target audience and purpose; this refers to the term 'multimodal orchestration' (Hafner & Ho, 2020). Having these two skills can be beneficial for pre-service teachers to create meaningful and effective multimodal texts. However, these skills are advanced and require strong scaffolding, which is often not fully addressed in the teacher education programmes (Tour & Barnes, 2020).

Another particularly interesting finding regards the EFL pre-service teachers' agency in designing the slides. While previous work has highlighted a positive correlation between digital tools and students' agency (Dahlström, 2021; Lim & Nguyen, 2022; Magnusson & Godhe, 2019; Marissa & Hamid, 2022; Veum, Siljan, & Maagerø, 2021), this study's findings present a contradiction. The pre-service teachers admitted they did not 'think everything thoroughly' during the design process. Although they showed agency in selecting the template and adding some decorative elements, their confession of 'I just followed the

template,' suggests that the affordances of the pre-designed template constrained their capacity for deeper, pedagogically meaningful adjustments. This implies that while templates can make the design process less time-consuming, they can unintentionally diminish purposeful multimodal orchestration.

These findings have important implications for teacher education programs. Pre-service teachers need not only theoretical exposure to multimodal discourse but also guided, reflective practice that helps them critically evaluate how modes interact and align with learning objectives (Tour & Barnes, 2020).

5. Conclusion

This study examined the multimodal composition of presentation slides created by EFL pre-service teachers through the lens of Systemic Functional Multimodal Discourse Analysis. By analysing the verbal, visual, and gestural modes across selected slides, the study revealed a recurring pattern: although the verbal, visual, gestural modes appeared in the slides, the verbal mode carried the main instructional content through imperative structures, while the visual and gestural modes primarily served decorative or supportive purposes. The intersemiosis also appeared to be limited. The slides did not consistently align the resources to support the thematic or instructional goal of engaging the students. This disconnect between design intention and semiotic realisation reflects a gap in pre-service teachers' ability to apply multimodal theory in practice.

The findings underscore the importance of equipping pre-service teachers not only with theoretical knowledge of multimodal concepts but also with hands-on opportunities to apply this knowledge in authentic design tasks. This includes engaging them in the full cycle of designing, evaluating, and revising multimodal texts, where they can critically reflect on how they construct meanings across different modes. The results also highlight a pressing need for teacher education programs to develop and incorporate practical modules on digital multimodal composing, using accessible tools such as Canva, Genially, or Adobe Express. Incorporating these platforms for experimentation presents real-world constraints and affordances that pre-service teachers are likely to encounter in designing their teaching media. Through guided use of such platforms, future educators can build the ability to deliberately select and combine visual, verbal, gestural, and even other resources in ways that align with specific learning objectives, audience needs, and genre conventions.

One limitation of this study is its small sample size and focus on a single group's slides, which may not reflect broader trends among pre-service teachers. Future research could expand the dataset to identify recurring multimodal challenges. Additionally, integrating think-aloud protocols or design journaling during the slide creation process may offer deeper insights into how pre-service teachers make semiotic decisions, especially under time or platform constraints. Lastly, future studies could expand on this work by exploring multimodal teaching materials across diverse contexts and examining how reflective practice influences teachers' development as multimodal composers.

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