

# Multimodal Learning Strategies in Secondary EFL Education: Insights from Teachers

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#### Abstract

Multimodal learning has shown promise in various educational settings, positively impacting teaching and learning outcomes. However, the multifaceted effects of multimodal learning on secondary EFL students' second language acquisition still need to be explored, especially at the secondary school level. A deeper understanding of how multimodal learning—which involves the integration of linguistic, auditory, visual, and kinesthetic modalities to convey information—influences second language learning is crucial for effective language teaching. The study aims to explore the role and instructional practices of multimodal learning in enhancing students' second language outcomes through in-depth interviews with teachers. Eight English teachers from several junior high schools across East Nusa Tenggara, Indonesia, participated in the study. The participants had varied teaching experiences: three teachers with 6–10 years, four with 11–15 years, and one with over 16 years of experience. The results indicate that teachers have diverse experiences integrating various combinations of learning modes into their teaching practices. Four key themes emerged regarding the role of multimodal learning in students' second language acquisition, enhancing understanding, improving retention, encouraging participation and motivation, and accommodating different learning styles. This study offers insights for teachers to optimize their teaching strategies and highlights the effectiveness of multimodal approaches in English language education.

Keywords: Multimodal learning, multimedia, second language acquisition, English language learning.

### INTRODUCTION

In modern learning environments, multimodality is increasingly embraced, reflecting a trend toward multidisciplinarity, where diverse disciplines enrich each other by exchanging tools, concepts, and innovative ideas. This approach is vital in the 21st century for accommodating diverse learning styles and preferences by combining visual, auditory, kinesthetic, and digital tools (Kessler, 2022; Laadem & Mallahi, 2020; Veliz & Véliz-Campos, 2023). By broadening the options within a learning environment, multimodal strategies allow students to generate knowledge collaboratively using their preferred modes while encouraging the exploration of alternative modes (Lin, 2019; Nouri, 2019). Such strategies create immersive environments that enhance linguistic proficiency, foster creativity, critical thinking, collaboration, and communication, and encourage students to engage deeply with language content, think analytically, collaborate meaningfully, and articulate their ideas with greater clarity (Dobrova et al., 2019; Miller, 2018; Pentury et al., 2020).

Multimodality in language education involves coordinating multiple sign systems to convey a unified message, which is crucial for second language acquisition (Shin & Chimasko, 2020). Learning a foreign language has traditionally centred around interacting with texts as fundamental units for understanding language structures. While the use of authentic texts in language teaching is not new, the ways educators integrate various texts—oral, written, and across different genres—are continually evolving. Multimodal learning acknowledges students' diverse learning styles and preferences by integrating various modes of instruction. For example, visual aids can enhance students' understanding of English language structures by improving their ability to visualize concepts (Halwani, 2017; Lin, 2019). Auditory activities, such as listening exercises, learning through songs, pronunciation drills, and immersive language experiences, can improve students' auditory competency in English (Harsa et al., 2020; Khan et al., 2020). Additionally, kinesthetic activities like gesture-based learning and physical movement offer practical experiences that significantly enhance language learning (González-Carriedo et al., 2020; Kuo et al., 2014).

Furthermore, several literatures highlight key findings from recent studies on integrating multimodality in English language teaching. Choi and Yi (2015) found that multimodal approaches, which incorporate various forms of media and sensory experiences, significantly enhance English language learners (ELLs) understanding of content, allowing them to grasp complex concepts better. Additionally, these approaches support ELLs in expressing themselves more powerfully, boosting their self-esteem and confidence in language use. Yi (2014) emphasized that while multimodal practices enable adolescent ELLs to explore and express their identities, further research is still needed to understand how these identities shape and influence their language learning experiences, particularly in diverse cultural contexts. Magnusson and Godhe (2019) concluded that multimodal teaching positively impacts students' motivation, productive skills, and learning autonomy. However, its success largely depends on teachers' ability to effectively design and implement these activities. Collectively, these studies suggest that by addressing diverse learning needs and fostering a more engaging learning environment, multimodal teaching is highly beneficial in ELT contexts for both students and educators.

A literature review reveals that multimodal interaction is highly relevant in modern foreign language teaching methods. Despite the recognized benefits of multimodal learning in second language acquisition (SLA), its impact on EFL students, particularly at the secondary school level in Indonesia, still needs to be explored. Most research has focused on higher education or younger learners, leaving a gap in understanding how multimodal strategies affect secondary school students. More research is needed to implement these strategies across different cultural backgrounds and diverse educational settings. This study seeks to fill these gaps by providing insights from teachers with varied cultural backgrounds and teaching experiences in diverse contexts. By examining the impact of multimodal learning on students' SLA in these settings, this research aims to offer a richer and more comprehensive understanding. Specifically, it addresses how teachers integrate multimodal learning into their instructional practices and explores the roles of multimodal learning in students' second language acquisition.

#### METHOD

This qualitative study employs a phenomenological approach to explore how teachers integrate multimodal learning into their instructional practices and the roles of multimodal learning in students' second language acquisition. Phenomenology, a form of qualitative research, is particularly well-suited for this study as it focuses on understanding individuals' lived experiences within the world (Neubauer et al., 2019). This approach allows for a deep exploration of teachers' experiences, providing valuable insights into the implementation and impact of multimodal learning in language education. Purposive sampling was used to select participants based on specific criteria relevant to the study, aiming to gather information-rich cases related to the phenomenon of interest (Palinkas et al., 2013). The participants include eight English teachers who have experience applying multimodal learning strategies and can provide insightful and nuanced perspectives on the role of these strategies in English language teaching. These teachers are from eight junior high schools across six East Nusa Tenggara regents: Kupang, Timor Tengah Selatan (TTS), Belu, Rote, Alor, and Sumba Timur. The selected participants have varied teaching experiences: three have 6 to 10 years, four have 11 to 15 years, and one has more than 16 years of teaching experience. All participants hold undergraduate degrees in English education, with one holding a graduate degree in the same field. These eight teachers provide a suitable sample for this study. The demographic information of the participants is presented in the following table:

No	Participant	Residence	Years of teaching	Education
	code		experience	Qualification
1.	Teacher 1 (T1)	TTS	6 – 10 years	Undergraduate
2.	Teacher 2 (T2)	TTS	16 – 20 years	Undergraduate
3.	Teacher 3 (T3)	Sumba	6 – 10 years	Undergraduate
4.	Teacher 4 (T4)	Kota	11 – 15 years	Undergraduate
5.	Teacher 5 (T5)	Kupang	6 – 10 years	Undergraduate
6.	Teacher 6 (T6)	Rote	11 – 15 years	Graduate
7.	Teacher 7 (T7)	Belu	11 – 15 years	Undergraduate
8.	Teacher 8 (T8)	Alor	11 – 15 years	Undergraduate

Participants were interviewed using semi-structured interviews to explore their experiences, practices, and beliefs regarding incorporating multimodal learning in language instruction and its influence on students' second language acquisition. The primary aim of a semi-structured interview is to facilitate an interactive dialogue, allowing individuals to explain how they understand and interpret their experiences (Knott et al., 2022). The interview protocol was designed to elicit detailed and comprehensive responses, covering topics such as the use of multimodal resources in second language learning, the roles of multimodal learning, and the challenges faced in its integration.

Interviews were recorded with participants' explicit consent and transcribed verbatim for analysis. The transcripts were anonymized to ensure confidentiality and underwent thematic analysis to identify recurring patterns, topics, and categories relevant to the study's questions. These codes were then grouped into overarching themes and sub-themes that capture participants' perspectives (Naeem et al., 2023) on the impact of multimodal learning on English language acquisition. Themes were derived through meticulous analysis, ensuring all factors were considered and the participants' perspectives accurately represented. To enhance the trustworthiness of the findings, transcripts were returned to participants for member checking, ensuring transparency and coherence. This qualitative methodology provides a comprehensive investigation into the effects of multimodal learning on students' English language acquisition, drawing on the valuable insights and experiences of language teachers.

#### FINDING AND DISCUSSION

#### **Integration of multimodal learning**

A comprehensive analysis explores the roles of multimodal learning in students' second language acquisition and reveals how participants effectively integrate these diverse methods into their teaching practices. The researchers extract significant data from participants' responses, detailing how they incorporate multimodal learning.

Teacher	Instructional Mode	Description from the interview transcript
T1	Text, Audio, Visual	Distributes cloze reading texts, plays audio, shows video, and students make a presentation.
T2	Text, Visual, Kinesthetic	Presents illustrated texts with pictures and uses body language and facial expressions in storytelling.
Т3	Audio, Text	It uses audio speakers, writes lyrics on board, or watches lyric videos.
T4	Text, Visual, Audio, Kinesthetic	Matches sentences/paragraphs with pictures checks correct words during listening, and practices acting out sentences.
T5	Visual, Audio, Kinesthetic, Digital	It uses pictures with colour, voice recordings, gestures in gaming, videos, and animations.
Т6	Visual, Audio, Digital	Utilizes multimedia equipment like projectors, speakers, and digital tools like Kahoot.
Τ7	Text, Audio, Visual	Introduces topics using audio conversations and displays transcripts, pictures, and diagrams.
T8	Text and visual	Displaying pictures with text to describe the pictures

**Table 2.** Participants responses on the integration of multimodal learning

The table clearly shows that the participants implement a variety of multimodal combinations in their teaching practices. These approaches engage students on multiple sensory levels, making learning more dynamic and immersive (Gilakjani et al., 2011). The participants use four main combinations of learning modes: 1) textual and aural multimodal learning, 2) textual and visual multimodal learning, 3) textual, visual, and aural multimodal learning, and 4) textual, aural, visual, and kinesthetic multimodal learning.

The following discusses how the participants integrate each combination of multimodal learning: T1, T3, T4, and T7 reported using textual and aural multimodal learning. These participants shared their experiences combining reading and listening activities to enhance comprehension and engagement. For example, T1 uses cloze reading texts paired with audio, prompting students to fill in the blanks while listening. T3 enhances song comprehension by playing audio and displaying the lyrics on the board or through lyric videos. T4 provides listening materials and asks students to identify words from a written list, matching the spoken words with their written forms to improve listening accuracy and vocabulary. T7 introduces topics with audio conversations, supplemented by text transcripts and keywords on the screen, helping students connect spoken dialogue with written text for better understanding. Incorporating these audio-learning resources can significantly improve students' auditory competencies, mainly by exposing them to various accents and increasing their ability to understand speakers with different accents (Harsa et al., 2020).

Another combination of learning modes applied by the participants in their classes is textual and visual multimodal learning. T2, T4, T7, and T8 integrate written content with visual aids to enhance students' comprehension and retention. For example, T2 presents illustrated texts, such as recount texts about vacation experiences, where each event is paired with a picture to help students visualize the content. T4 asks students to match sentences or paragraphs with corresponding pictures, which aids their understanding of descriptive and narrative texts. T7 enhances learning by displaying pictures or diagrams alongside text to illustrate conversation scenarios, making abstract concepts more tangible. Similarly, T8 teaches descriptive texts by showing pictures accompanied by descriptive text, allowing students to visualize and understand the descriptions better. This approach aligns with previous studies that highlight the positive impact of visualization on students' language comprehension in EFL learning (Halwani, 2017; Lin, 2019).

Further analysis shows that T1, T4, T5, and T6 integrate textual, auditory, visual, and digital multimodal learning, creating a rich, interactive environment that engages multiple senses. T1 combines cloze reading texts with audio playback and video demonstrations, followed by student presentations based on the video content. T4 uses listening materials alongside pictures and text, asking students to match auditory input with visual and textual content, and incorporates kinesthetic elements by having students act out sentences. T5 employs pictures, voice recordings, music, gestures in gaming, and digital animations to create a dynamic learning experience. T6 utilizes multimedia equipment like projectors and speakers and incorporates digital tools such as quizzes and Kahoot to enhance student engagement and learning.

From the finding above, the participants have observed the benefits of this multimodal approach, which creates immersive language learning experiences that can enhance students' language competencies. Previous studies support these findings, showing that using audiovisual media along with text improves listening comprehension, attention, participation, and language skills, as students can directly imitate what they see and hear (Dheghu et al., 2021; Harsa et al., 2020; Khan et al., 2020; Singh et al., 2021). Exposure to written and oral language forms positively affects speech segmentation, processing, and pronunciation (Perez, 2020). Additionally, the regular use of technology, such as videos,

audio recordings, and interactive games, further enhances motivation and engagement, making lessons more appealing and accessible (Nouri, 2019).

Furthermore, the participants' last combination of learning modes is textual, visual, auditory, and kinesthetic multimodal learning. By integrating these modes, T2, T4, T5, and T6 provide a comprehensive and engaging learning experience. T2 combines illustrated texts with oral storytelling, using body language and facial expressions to animate narratives. T4 integrates listening materials with pictures and text, engaging students in kinesthetic activities by having them act out imperative sentences. T5 uses colourful visuals, voice recordings, music, gestures in gaming, and digital videos and animations to create an interactive and immersive learning environment. T6 leverages multimedia equipment and digital tools like quizzes and Kahoot, alongside traditional visual and auditory aids, to cater to diverse learning styles. Incorporating movement and gestures into language learning significantly enhances students' cognitive, academic, and linguistic outcomes (González-Carriedo et al., 2020; Kuo et al., 2014).

Additionally, teachers employ these strategies to match the material's difficulty with learning goals and time constraints. Observations of students' learning styles and initial diagnostic assessments guide the tailoring of these multimodal strategies to individual needs. Adjusting methods based on student feedback ensures that the approaches remain practical and relevant. Regular use of technology, such as videos, audio recordings, and interactive games, further enhances motivation and engagement, making lessons more appealing and accessible (Nouri, 2019).

### The roles of multimodal learning in students' second language learning

The data collected from the interviews revealed five major themes regarding the roles of multimodal learning. All participants agreed that incorporating multimodal learning significantly improves students' understanding of language materials compared to conventional methods. By delivering linguistic input through various modes—such as interactive exercises, visual aids, and audio resources—teachers can enhance students' comprehension and engagement.

Teacher	Description from the interview transcript
T1	Multimodal learning improves students' memory of words and pronunciation
	compared to conventional methods.
T2	Students better understand content, new vocabulary, and text structure with
	multimodal learning.
T5	Students' speaking ability improves as they see, hear, and observe material
	presented in video form.
T6	Multimodal learning provides a detailed and meaningful representation
	through visuals and audio, improving pronunciation and understanding.
Τ7	Multimodal learning enhances understanding and mastery through practical
	activities involving multiple senses.
T8	Multimodal learning improves understanding, increases enthusiasm, and
	makes students happier to participate.

Tab	le 3.	Partici	pants'	respo	nses s	showii	ng mu	ultim	odal	learning	enhances	understanding	
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The participants' feedback collectively highlighted the substantial benefits of multimodal learning in enhancing students' understanding of language material. T1 noted that multimodal learning, which utilizes various media and sensory inputs, helps students remember words and correct pronunciations more effectively than conventional methods, often leading to short-term retention. T2 affirmed that this approach not only aids in memorization but also improves students' comprehension of text content, vocabulary, and structure. The complementary use of different modes in multimodal learning enhances students' grasp of complex concepts (Choi & Yi, 2016).

Additionally, T6 emphasized that multimodal learning significantly enhances language skills such as speaking and pronunciation. T5 observed that when students see, hear, and interact with material presented in video form, their speaking abilities improve markedly. Using videos and visual aids allows students to observe and mimic accurate pronunciations and intonations from native speakers, directly hearing the language in context. This immersive exposure refines their pronunciation, intonation, and conversational skills, improving their language proficiency. Teachers' experiences with multimodal learning demonstrate how exposure to authentic materials, similar to real-life examples, helps students grasp concepts more effectively (Gilakjani et al., 2011).

T3 noted that students find it easier to remember and memorize lyrics or vocabulary through multimodal methods, highlighting that engaging multiple senses creates a more effective and lasting learning experience. Similarly, T8 agreed that students' understanding of language materials improves with multimodal learning, adding that students appeared more enthusiastic and happier to participate. Positive feedback from students indicated that diverse language input increased their attentiveness, enjoyment of learning, creativity, confidence, and relaxation (Khan et al., 2020; Lin, 2019). This aligns with Krashen's input hypothesis, which suggests that exposure to varied, comprehensible input in a low-anxiety environment promotes natural language acquisition (Li, 2023).

Teacher	Description from the interview transcript
T1	A combination of learning modes reinforces and helps students retain
	information longer.
T2	Multimodal learning makes students more active and creative, aiding
	retention.
Т3	Different approaches leave a lasting impression in memory.
T4	Multimodal learning helps students remember material better by catering to
	their learning styles.
T5	Animations help students understand stories better than just text.
T6	Direct experiences are easier to remember and apply.
Τ7	Multimodal learning reinforces understanding, making it more durable.
T8	Multimodal learning helps students retain information longer by engaging
	their senses and aligning with their interests.
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Table 4.	Participants	' responses	on students'	learning impr	ove retention
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The eight participants' viewpoints converge on the idea that employing various learning modes significantly enhances students' retention of material. They emphasized that multimodal learning reinforces and affirms information through different channels, making it easier for students to remember. For example, T1 observed that combining text with audio

or video aids long-term retention. At the same time, T7 noted that multimodal learning strengthens understanding, as shown by students' ability to recall information in later tests. Similarly, T4 and T8 highlighted that using images, sounds, and other sensory inputs caters to different learning styles, making the material more memorable and engaging.

This suggests that students are more likely to process and remember information through distinct cognitive pathways. This leads to deeper encoding and more durable memory traces when linguistic input is delivered in various forms. This aligns with dual coding theory, which posits that information retention improves when presented in both verbal and visual forms (Paivio, 2010). Multimodal materials like pictures, videos, and multimedia presentations provide students multiple ways to encode language knowledge. For instance, when vocabulary words are paired with relevant images or gestures, students may retain them more effectively as the visual aids clarify their meaning.

Several participants emphasized the active involvement and creativity that multimodal learning fosters. T2 noted that active engagement through diverse activities helps students retain what they have learned, while T6 highlighted that direct, experiential learning is more accessible to recall and apply. T5 provided an example, explaining that animation or storytelling aids comprehension more effectively than text alone, making complex information more accessible. T3 added that the novelty of multimodal approaches leaves a lasting impression on students' memories. These perspectives suggest that multimodal learning aligns with individual preferences and creates a more dynamic and memorable learning experience.

By connecting language forms to situational signals and real-world experiences, multimodal learning contextualizes language input within meaningful and realistic scenarios, promoting memory retention (Gilakjani et al., 2011). Students are more likely to retain and internalize linguistic structures used in everyday events or cultural practices when exposed to multimodal texts. Repeated exposure to language information through various modalities strengthens memory consolidation and reinforces learning (Aisami, 2015; Risnawati et al., 2018). For instance, students might encounter target vocabulary in multiple multimodal contexts, such as hearing it in conversation, reading it in text, and practising its pronunciation through interactive exercises or oral repetition.

Teacher	Description from the interview transcript
T1	Students become motivated to ask about the meaning of words they hear.
T5	Students are more engaged and interested when using creative videos that are
	familiar to them in their daily lives.
T6	Students pay more attention and ask questions when the material is
	presented visually.
T7	Students actively engage and become more relaxed when given opportunities
	to perform in front of the class.
T8	Students are more engaged when all their senses are involved, such as
	through role-playing after being shown text with audio or video.

Table 5. Participants' responses on students' participation and motivation

The responses indicate that multimodal learning significantly boosts students' curiosity and encourages them to ask questions. For instance, T1 observed that when students encounter new expressions or words in multimedia formats like audio, they are

motivated to seek clarification, which promotes more profound understanding and retention. T5 noted that creative and relatable educational videos enhance student engagement and interest, making the learning experience more enjoyable and relevant, thus increasing motivation. Visual presentations capture students' attention and lead to more severe observation, as noted by T6, who observed that this visual engagement prompts more questions and fosters an interactive learning environment. T7 highlighted that allowing students to perform, such as acting out conversations, challenges them to engage actively, helping them become more comfortable and creative, which reduces anxiety and enhances motivation. T8 emphasized that activities like role-playing after watching or listening to examples engage students more fully by catering to different learning styles, making learning dynamic and interactive. The data suggest that multimodal learning increases student participation by making learning more engaging and interactive. Visualization activities, in particular, enhance attentiveness, enjoyment, creativity, confidence, and relaxation, motivating students to participate more actively (Lin, 2019). Additionally, incorporating movement in lessons has been linked to higher levels of engagement and interaction in the classroom (González-Carriedo et al., 2020).

Teacher	Description from the interview transcript
T1	Allows students to provide feedback on teaching methods and lesson content.
T2	Adjusts teaching to students' learning styles, such as transforming narrative
	texts into songs or storytelling with gestures.
Т3	Adapts to students' needs and preferences.
T4	Uses initial diagnostic assessments to tailor teaching methods to students'
	learning styles.
T6	Determines teaching strategies based on diagnostic assessments of students'
	learning styles, using visual, auditory, audiovisual, or kinesthetic modes as
	needed.
Τ7	Encourages creativity by allowing students to present in pairs according to
	their learning styles.
T8	Believes in accommodating all learning styles with varying levels of
	dominance and adjusts teaching accordingly.

**Table 6**. Approach to Student Learning Styles

Multimodal learning effectively addresses students' diverse learning styles, creating a more personalized and inclusive educational experience. By allowing students to communicate their acceptance of teaching methods and provide feedback on daily lessons (T1), teachers can continuously adapt their approaches to suit individual needs better. Recognizing and adjusting to different learning styles is crucial; for example, students who enjoy singing can transform narrative texts into song lyrics, while those who prefer storytelling can use body language and facial expressions to bring stories to life (T2). This flexibility ensures that each student's unique preferences and strengths are accommodated, enhancing their engagement and understanding (Cosentino & Giannakos, 2023; Perez, 2020). Tailoring teaching methods based on diagnostic assessments of students' learning styles (T4, T6) further refines this approach. By identifying whether students benefit more from visual, auditory, audiovisual, or kinesthetic modes, educators can customize their strategies to optimize learning outcomes. For instance, visually oriented students can be presented with visually rich content, while those who thrive with auditory input can engage in lectures and discussions.

Incorporating performance-based activities that allow students to express creativity in pairs (T7) also accommodates different learning styles and provides opportunities for active participation. T8 acknowledges that students may exhibit multiple learning styles with varying dominance and adjusts teaching methods accordingly, accommodating combinations such as auditory-visual or auditory-kinesthetic preferences (Lin, 2019; Nouri, 2019).

## CONCLUSION

The study exploring the role of multimodal learning in second language acquisition reveals a complex environment where teachers employ a wide range of strategies to enhance language learning outcomes. Through interviews with eight teachers, the study sheds light on the diverse experiences and approaches used to incorporate multimodal methods into language instruction. Several key themes emerged, highlighting the impact of multimodal learning on improving comprehension, fostering active engagement, and supporting various learning styles. A significant finding is the ability of multimodal learning to enhance comprehension. By using multiple modalities, such as interactive exercises, visual aids, and audio resources, teachers can cater to diverse learning preferences and promote more profound understanding. The study also highlights the role of repetition across modalities, dual coding theory, and enhanced cognitive processing in improving retention. Additionally, the research shows how multimodal learning supports active engagement by fostering interactive communication, authentic language use, and tailored instruction, creating dynamic learning environments that meet students' specific needs.

Moreover, the study emphasizes that multimodal learning increases motivation by engaging learning, providing personalized experiences, and connecting language instruction to practical applications. The study concludes by underscoring the critical role of multimodal learning in improving second language acquisition. By embracing diverse modalities and addressing individual needs, teachers create inclusive and dynamic learning environments that enhance understanding, retention, engagement, and motivation. Integrating multimodal approaches is transforming language instruction, offering promising opportunities to improve language learning outcomes and experiences through ongoing research and collaboration.

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