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## Multimodal Pedagogical Skills of Kenyan English Secondary School Teachers

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### Abstract

This study investigated the multimodal pedagogical skills of Kenyan secondary school English teachers, examining how these teachers integrate verbal, visual, gestural, spatial, and digital modes in classroom instruction. In this 21st-century learning classroom, the core traditional language skills such as listening and speaking, reading, and writing are no longer adequate. A learner should be guided to design, view, and critique multimodal content. Grounded in the Multimedia Learning Theory, this study examined how teachers use multimodal interactive digital tools to enhance language learning and teaching effectiveness. A descriptive mixed-method design was employed by adopting semi-structured interviews and questionnaires with 30 purposively selected teachers. The teachers were purposively sampled from six schools within Maragua Sub-County in Murang'a County. The findings reveal a moderate multimodal competence, with approximately 86% of instructional practices being lecture-based while only about 35% involved interactive digital tools. The limited engagement of visual and digital modes was attributed to inadequate infrastructure, insufficient professional training, and weak policy support for multimedia resources. Informants interviewed revealed that multimodal practices are often treated as optional rather than integral to English instruction. This is a situation reinforced by curriculum structures that do not explicitly scaffold multimodal teaching competencies. The study recommends targeted professional development in digital multimodal pedagogy as well as curriculum revision to embed digital multimodal practices. This can promote inclusive, contextually responsive English language learning.

**Keywords:** Teachers of English, Secondary school, Multimodality, and Pedagogical competency.



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## 1. Introduction

In this study, multimodal pedagogical skills refer to the adoption of teaching and learning strategies that engage multiple audio and visual elements of communication to support and reinforce learning English [1]. Learning in secondary schools plays a pivotal role in preparing future professionals. There is need to adopt digital innovative methodologies that respond to the evolving demands of education. [2], the rapid advancement of digital technology has significantly transformed various aspects of the educational landscape. In modern classrooms, traditional instructional methods are increasingly being complemented or, in some cases, replaced by multimodal approaches that combine textual, visual, auditory, and interactive digital resources [3].

As [4] explain, multimodal strategies in education leverage multiple modes of communication to create diverse and dynamic learning experiences. These varied approaches address the distinct learning preferences and needs of individual students, ensuring that teaching is not one-dimensional but rather inclusive of different cognitive styles [5]. By engaging learners through multiple sensory channels, multimodal strategies can enhance student involvement and motivation, since it makes the learning process more interactive and stimulating. [6] posit that this multi-sensory engagement not only boosts learners' interest but also fosters deeper comprehension by allowing them to process and internalize information in different formats, which may support long-term retention and application of knowledge. Consequently, the use of multimodal strategies contributes to improved instructional effectiveness, enabling educators to tailor their teaching methods to better meet the unique challenges and strengths of their learners.

In the context of English language learning, Barnes and [7] emphasize the critical role of incorporating multimodal approaches within English lessons. They argue that English teachers must be equipped with the pedagogical skills necessary to integrate diverse modes of communication such as images, videos, gestures, spoken language, and written texts into their teaching practice. Such integration not only enriches the learning environment but also makes language instruction more accessible and inclusive, especially for learners with varying linguistic backgrounds and abilities. [8] posit that multimodal teaching strategies empower teachers to create lessons that are culturally relevant, engaging, and adaptable, which are essential in fostering effective language acquisition. By doing so, these approaches help bridge gaps in understanding and encourage active participation, ultimately leading to improved learner outcomes in English proficiency [9]. Thus, multimodal pedagogy is fundamental for achieving inclusive, effective, and modern language instruction that resonates with today's diverse classrooms.

[10] explores how integrating multiple sensory modalities can create flexible and robust human-computer interactions. He emphasizes the significance of designing systems that allow users to switch seamlessly between modalities, thereby reducing cognitive load and enhancing usability. Drawing on these insights, the current study extended multimodal interaction theory into the English classroom context. Unlike prior work that focuses mainly on technological systems, this study contributes new pedagogical evidence by showing how multimodal strategies can be applied in classroom teaching to reduce cognitive overload and promote deeper comprehension among learners [11].

### 1.1 Statement of the Problem

The growing shift toward digital learning in education calls for the integration of diverse instructional strategies, to enhance language teaching. Multimodal approaches improve learner engagement, comprehension, and instructional effectiveness. However, their adoption remains limited in many secondary schools, particularly in the teaching of English in Kenya. This gap can hinder effective classroom practice, as teachers may struggle to implement multimodal strategies successfully. As a result, pedagogical effectiveness and instructional quality may be compromised. Therefore, assessing teachers' multimodal pedagogical competencies is essential. This can strengthen instructional practices and improve learner outcomes.

### 1.2 Research Objectives

- 1) To examine the extent to which teachers of English adopt multimodal instructional strategies.
- 2) To assess the effectiveness of multimodal instructional strategies in enhancing teachers' pedagogical competencies.
- 3) To determine the barriers that hinder the effective implementation of multimodal instructional strategies.

## **2. Literature Review**

### **2.1 Adoption of Multimodal Strategies by Teachers of English**

Studies on multimodal pedagogy consistently emphasize the need of integrating visual, auditory, and textual elements to support language learning. For example, [12] demonstrates how combining multiple modes can enhance English as a second language (ESL) instruction in promoting quality education. As much as this study establishes the instructional potential of multimodal communication, it pays limited attention to how such strategies are embedded in teachers' routine pedagogical practices. This is particularly evident in secondary school English classrooms.

Building on this perspective, [13] examine the pre-service teachers' beliefs about multimodal instruction and assessment. Even though their findings reveal positive attitudes toward multimodal tools, non-linguistic modes have been regarded as supplementary rather than central to meaning-making. When considered alongside [12], this suggests that despite theoretical endorsement of multimodality, its usage remains partial. This incomplete internalization of multimodal pedagogy highlights an adoption gap that have persisted among in-service secondary school English teachers. The current study addresses this gap within the Kenyan secondary school context.

### **2.2 Effectiveness of Multimodal Strategies in Enhancing Pedagogical Competencies**

[14] examine challenges and opportunities in e-learning. The study identifies limited digital literacy as a constraint on effective teaching. Although situated in higher education, the study raises pertinent issues on teacher preparedness that are equally relevant to secondary school English instruction. This can help explain the partial adoption of multimodal strategies noted earlier.

Further evidence of multimodal effectiveness is explored by [15]. The authors argue that engaging multiple sensory channels enhances language acquisition and comprehension. Similarly, [16] indicate that collaborative digital storytelling expands learners' meaning-making opportunities. These studies reinforce the instructional value of multimodality. However, they focus primarily on learner learning outcomes. As a result, they provide limited insight into how multimodal strategies strengthen teachers' pedagogical competencies.

This limitation is addressed by [17] who argue that while multimodal literacy deepens comprehension, teachers normally experience uncertainty when transitioning from text-centered instruction to multimodal design. This finding links effectiveness directly to teacher competence rather than instructional tools alone. Collectively, studies from [14] to [17] suggest that the role of multimodal strategies in enhancing teachers' pedagogical competencies remains underexplored. The current study therefore advances this discussion by empirically examining this relationship in secondary English classrooms.

### **2.3 Barriers to Implementing Multimodal Strategies**

[18] report that multimodal digital activities increase learner engagement in secondary classrooms. This happens by encouraging interaction across visual, auditory, and textual modes. However, this study implicitly assume that teachers already possess the skills needed to design such activities. This assumption overlooks the competence gaps and obscures practical implementation challenges.

Similarly, [19] reveal that most teachers do lack confidence in sequencing visual, audio, and interactive elements effectively. The findings point out to pedagogical and training-related barriers. In line with this, [20] find that as much as teachers recognize the value of multimodality, unclear institutional expectations hinder its effective implementation. These findings reinforce the partial adoption patterns identified in Section 2.1 and the competence-related concerns discussed in Section 2.2. The reliance on self-reported confidence rather than classroom demonstrated practice further limits the explanatory depth of these studies.

Institutional context also plays a significant role. For instance, [21] reveal that multimodal competence varies across schools due to uneven support frameworks. [22] demonstrate that school leadership and access to technology can either facilitate or constrain teachers' adoption of multimodal strategies. As much as these studies identify structural barriers, they do not fully explain how such constraints shape teachers' actual classroom practices.

The training dimension of these challenges is emphasized by [23], who argue that digital multimedia has redefined English teaching pedagogy. However, the study offers limited insight into how teachers develop the skills

needed to orchestrate multiple modes effectively. This gap is reinforced by [24], who indicate that even with improved digital access, many English teachers demonstrate uneven coordination of gesture, image, talk, and interactive tools. Finally, [25] conclude that although multimodal design is central to contemporary literacy, many English teachers still feel unprepared to design lessons that engage learners multimodally. Taken together, these studies underscore the need for integrated research that simultaneously addresses adoption, effectiveness, and barriers, an approach taken by the present study.

## **2.1. Theoretical framework**

The analytical tool for this study was Cognitive Theory of Multimedia Learning (CTML) by [26]. The theory envisages that learners comprehend and retain information effectively when instructional materials engages both verbal (spoken or written text) and visual (images, diagrams, or videos) elements. This is opposed to relying on verbal content. CTML is embedded in the dual-channel assumption, where humans possess separate channels for processing visual (pictorial and auditory) information. It also entails the limited capacity assumption, which indicates that channel can only process little information at a time. Additionally, there is the active processing assumption, which indicates that meaningful learning occurs when learners engage in selecting, organizing, and integrating information.

This theory offers a robust framework to understand how learners acquire knowledge in environments where multiple modes of communication are used. In this study, the multimedia principle, which is one of the core principles of CTML, was used to examine how multimodal strategies are incorporated into English language instruction by teachers in Kenyan secondary schools. This principle clarifies that students learn better from words and images together than words alone. This makes the theory relevant in assessing instructional practices in the digital age as well as pedagogical effectiveness in aiding cognitive engagement that can improve learning outcomes.

## **3. Research Methodology**

### **3.1. Research design**

This study adopted a descriptive mixed-methods research design by integrating both quantitative and qualitative approaches. This was intended to provide a comprehensive understanding of teachers' use of digital multimodal strategies English lessons. The quantitative approach was used to establish the extent of adoption of digital multimodal strategies. This was intended to assess patterns related to teachers' multimodal pedagogical competencies across secondary schools. The qualitative component enabled an in-depth exploration of teachers' experiences, perceptions, and contextual challenges influencing the implementation of multimodal teaching strategies. The study concurrently integrated quantitative and qualitative findings to allowed for triangulation where numerical trends were explained and enriched through qualitative insights. This complementary use of methods strengthened the interpretation of results and also ensured that the study addressed the research objectives on adoption, pedagogical effectiveness, and barriers to the implementation of digital multimodal teaching strategies in Kenyan secondary schools.

### **3.2. Participants**

The study targeted teachers of English and employed purposive sampling to select 30 participants in Maragua Sub-County, Murang'a County, Kenya. The study focused on 6 secondary schools. From each school, five teachers of English were selected. This resulted in an equal contribution of participants across the institutions. Efforts were made to consider gender representation within each school. All selected teachers were aged 30 years and above. This sampling approach ensured consistency in participant numbers.

#### **3.2.1. Instruments**

Data were collected through a semi-structured interview guide and a structured questionnaire to generate qualitative and quantitative data. The questionnaire was adapted from existing studies such as [13], [15], and [17] on multimodal pedagogy and digital instructional practices. The closed ended questions were modified to suit the Kenyan secondary school English context. It comprised 20 closed-ended questions organized into three sections such as teachers' adoption of multimodal strategies, perceived effectiveness of these strategies in enhancing pedagogical competence, and challenges encountered during implementation. The questionnaire items were measured by considering number of participants who responded and the percentage of their response.

The semi-structured interview guide was developed by the researcher which consisted of 8 open-ended questions. The questions were designed to elicit in-depth insights into teachers' experiences, instructional practices, and contextual challenges related to multimodal pedagogy. Four interview sessions were conducted each lasting approximately 10 minutes. The intention was to gather qualitative data on the effectiveness of multimodal strategies and the barriers faced by teachers of English in their implementation.

To ensure instrument validity, the questionnaire and interview guide were reviewed by two experts in language education and educational technology to check on content relevance and clarity. A pilot study was conducted with a small group of five English teachers from Thika sub-county (a neighboring sub-county). Feedback from the pilot informed refinement of the instruments. The reliability of the questionnaire was established using test-re-test method with ten informants, divided into a group of five individuals which yielded an acceptable reliability result. The combination of these tools allowed for triangulation of data which strengthened the credibility of the study findings.

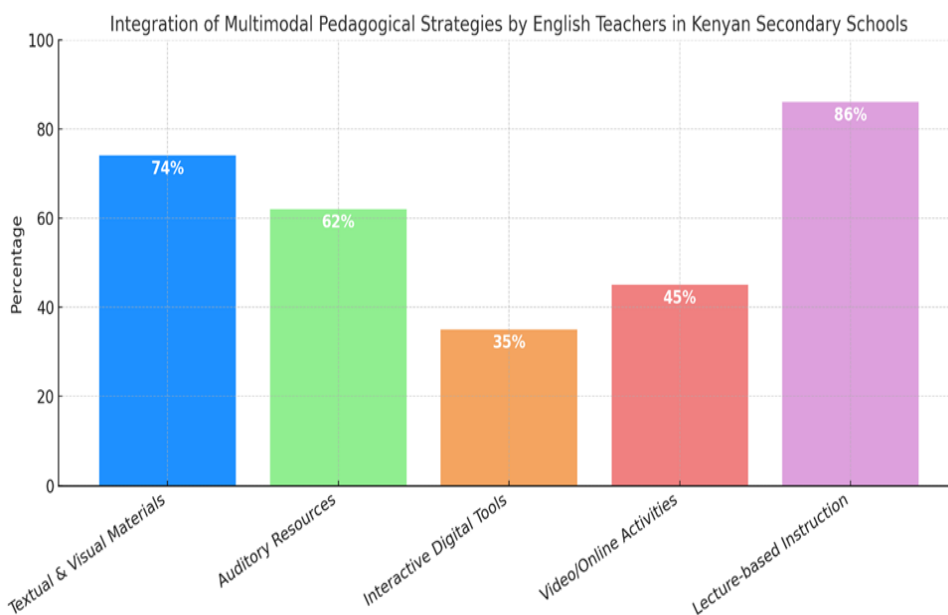
Thematic analysis was used to analyze qualitative data to identify recurring themes which are related to multimodal integration, instructional challenges, and teaching effectiveness. Further, the quantitative data obtained from the questionnaires were then analyzed using descriptive statistics. These were specifically presented in percentages using tables, to determine the extent to which multimodal strategies are being adopted for instruction in secondary school English learning. Ethical considerations were observed by seeking the written consent of the participants. The participants were fully informed about the purpose of the study, and their voluntary participation was considered. All personal data were anonymized to ensure confidentiality and also protect the privacy of the respondents.

#### 4. Results and Discussions

##### 4.1. Adoption of Multimodal Strategies by Secondary English Teachers

This section examines the extent to which secondary school English teachers integrate multimodal strategies into classroom instruction. Data from questionnaires provided quantitative indicators of adoption levels. The authors explored the extent to which different modes such as textual, visual, auditory, interactive, and digital tools are incorporated into classroom teaching in order to support and enhance English learning. The data collected from teachers of English across six secondary schools in Kenya offer an overview of current teaching practices, the challenges encountered, and potential areas for improvement. The findings are visually presented using a bar chart to illustrate the level of integration of each mode within the instructional process. Figure 1 presents the frequency of use of different multimodal strategies across the sampled schools.

**Figure 1**  
**Multimodal strategies employed by English secondary teachers in Murang'a County, Kenya**



**Note:** Figure 1. presents digital multimodal strategies secondary English teachers engage in learning instruction.

The bar graphs in figure 1. reveals the extent to which Kenyan English secondary schools incorporate various multimodal strategies into their instructional practices. The data is presented across five categories: textual and visual materials, auditory resources, interactive digital tools, video /online activities, and lecture-based instruction. This reflects how technology-supported and multimodal approaches have been adopted, either in conjunction with or as alternatives to traditional teaching methods.

The findings reveal that lecture-based instruction is the most dominant teaching strategy. This is indicated by 86% of teachers, showing a strong reliance on traditional pedagogical methods. Textual and visual materials were favored by 74% of informants interviewed followed by auditory resources at 62%, which are also depicted as commonly employed. This suggest that educators use some multimodal elements to reinforce English language instruction. Nevertheless, the response of 35% of the informants on the integration of interactive digital tools shows low integration of these digital tools. This is further supported by 45% of the informants who responded to the incorporation of video/online activities in English learning instruction. This points out a significant gap in the adoption of more engaging and technology-driven teaching strategies.

These findings highlight the urgent need for targeted teacher training and improved resource allocation. The training and resource allocation can facilitate the effective implementation of digital and interactive multimodal pedagogies in Kenyan secondary schools. From the findings, it is also evident that multimodal competencies are emerging in Kenyan secondary schools. However, their full implementation is still limited. The findings therefore suggests that teachers are engaging with additive multimodality using visuals and audio to support lectures, rather than transformative multimodality where digital and interactive modes reshape instructional design. This distinction is critical, as interactive multimodal strategies are more likely to foster learner agency, collaboration, and higher-order thinking.

The findings are consistent with [12] who highlights valuable insights into the effect of incorporating visual, auditory, and textual elements on language learning outcomes. However, the current study extends the literature by revealing that there is limited use of interactive digital resources in Kenyan secondary schools. This indicates a significant shortfall in adequately leveraging the benefits of digital multimodal teaching strategies. This underutilization underscores the need to enhance language teachers' multimodal pedagogical competencies, and their ability to adapt to diverse educational contexts. Additionally, the findings lend support to the multimedia principle envisaged in [26] on Cognitive Theory of Multimedia Learning, which postulates that learners acquire deeper understanding when instructional materials combine words and images more than relying on verbal content alone.

In the current study, findings show that language teachers in Kenya secondary schools partially embrace digital multimodal teaching strategies in their instructional practices. While some educators reported frequent use of textual, visual, and auditory resources, the integration of interactive digital tools still remains limited. Although certain secondary schools demonstrated that they have incorporated videos, online simulations, and digital storytelling into their programs, the traditional lecture-based instruction continues to dominate the English teachers' pedagogical skills. These findings align with [13], who notes that preservice teachers generally hold positive attitudes toward multimodal instruction as much as the traditional teaching methods persist in many modern classrooms. However, the current study shows that interactive digital multimodal tools are underused. This points to a critical gap in the adoption of digital multimodal teaching strategies, suggesting a pressing need to enhance the digital pedagogical skills of language teachers and also expand access to relevant technological resources.

#### **4.1.1. Qualitative Insights on Adoption: Interview Analysis**

During the interviews, informants were asked to reflect on the extent to which they incorporate multimodal strategies in their English lessons. The interview data were qualitatively analyzed using thematic coding procedures. Interview transcripts were coded inductively, resulting in four dominant themes: conditional use of multimodality, perceived pedagogical value, time and cognitive load, and instructional constraints. Representative quotations are quantified and presented to illustrate these themes in table 1.

**Table 1.**  
**Sample of responses on incorporation of multimodal strategies in English lesson**

Question	Quoted Response	Respondents (out of 30)	Percentage (%)
<i>To what extent do you integrate digital multimodal strategies in your English lessons?</i>	"I normally use them when the lesson demands."	22	73%
<i>How effective do you find multimodal teaching approaches?</i>	"They do help. learners to respond well to the lesson."	25	83%
<i>What challenges do you face when designing multimodal content?</i>	"It takes much time to craft and cognitively loading."	27	90%
<i>How do time constraints shape your multimodal teaching choices?</i>	"I experience limited time."	28	93%

Note: The interview data suggests that secondary English teachers recognize the pedagogical value of multimodal strategies, yet their actual use of these methods varies widely from one lesson to the next.

The data in Table 1. indicates that teachers generally acknowledge the value of digital multimodal learning strategies, though their engagements tend to be situational rather than routine. For instance, a total of 22 out of 30 respondents interviewed (73%) noted that they incorporate multimodal elements when appropriate. This is indicated in the quoted response "I normally use them when the lesson demands." The data also revealed almost unified views on the effectiveness of digital multimodal pedagogy, with 25 respondents (83%) agreeing that these approaches support engagement, as seen in the quote "They do help learners to respond well to the lesson." This indicates perceived benefits for learner engagement. However, this positive perception did not translate into consistent practice due to time and cognitive demands. This is posited in the quote, "It takes much time to craft and is cognitively loading," highlighting the instructional burden associated with multimodal lesson design. This indicates that there are substantial challenges limit consistent implementation. For instance, twenty-seven participants (90%) emphasized the need for considerable time to design multimodal learning materials. This is further extended to cognitive demands, with 24 informants (93%) hinting that planning multimodal activities can take much time, as envisaged in the quote, "I experience limited time."

These findings resonate with [14], who identify digital literacy and workload as barriers to sustained multimodal practice. The current study further reveals a practice gap where teachers value multimodality in teaching English but limited with time and professional support needed to integrate it routinely. The relevancy of redundancy principle from the Cognitive Theory of Multimedia Learning by [26] was evident, which posits that teachers can benefit from dual-channel processing, where verbal and visual elements are used to reinforce comprehension. However, the current study shows that both the modality principle (favoring audio over text alone) and the multimedia principle (combining text and visuals) are not fully adopted and utilized by English teachers in Kenyan secondary schools.

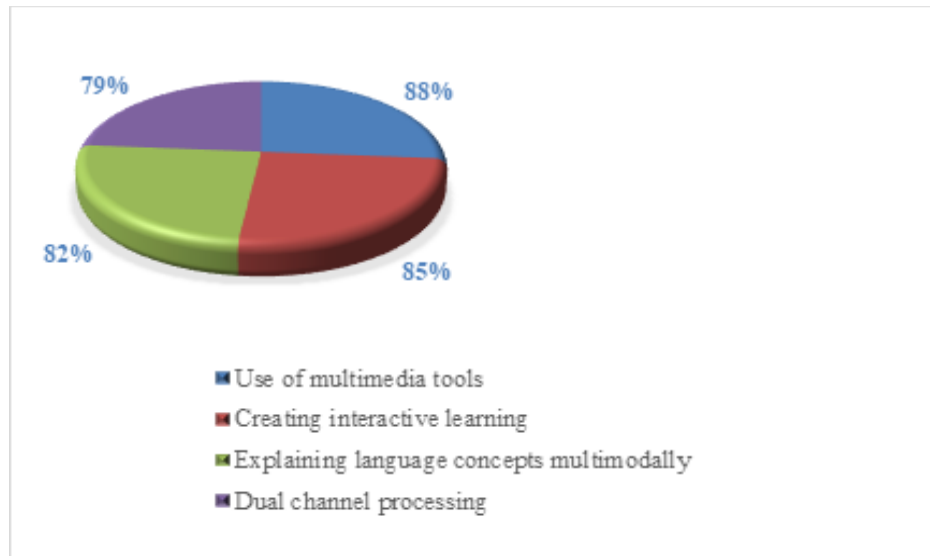
#### **4.2 Effectiveness of Multimodal Strategies in Enhancing Pedagogical Competencies**

To determine the effectiveness of various digital multimodal strategies in enhancing teachers' pedagogical competencies, quantitative data from the responses of the informants were analyzed. Percentage effectiveness in Figure 2 was

calculated by aggregating teachers' Likert-scale ratings ("effective" and "very effective") for each multimodal strategy and converting them into percentages of total responses. The results presented in Figure 2. are expressed as percentage effectiveness which reflect the extent to which each strategy was associated with improvements in teaching ability.

**Figure 2.**

**Perceived effectiveness of multimodal strategies among the Kenyan Secondary English teachers.**



**Note:** Figure 2 shows that the effective use of multimedia in lessons was rated the highest.

The data in Figure 2. indicates that language teachers consider multimedia as essential tool for delivering content-rich and engaging lessons as indicated by 88% of the informants who were issued with questionnaires. Similarly, 85% of the informants indicated interest in the ability to create interactive learning environments. Further, to explain language concepts using multimodal approaches received strong ratings by 82% of the informants. These findings demonstrate the value placed on enhancing student engagement in multiple sensory channels such as text, images, and audio.

Notably, dual-channel processing received a slightly lower rating of 79% as compared to other strategies, yet it is a fundamental concept in Cognitive Theory of Multimedia Learning [26]. This principle posits that learning is more effective when verbal and visual inputs are integrated. This is so since it improves memory retention as well as conceptual understanding. The relatively lower rating might be due to the challenges teachers face in recognizing the tangible benefits of this principle in classroom.

The data presented in Figure 2. suggest that language teachers acknowledge multimodal pedagogical strategies such as using digital media that promote interactivity. This highlights a gap between theoretical knowledge and classroom practice. This finding aligns with [15], who stress the significance of integrating visual, auditory, and textual elements to enhance language learning. The current study advances this discussion by showing that effectiveness is not merely about tool usage but about pedagogical intentionality and conceptual grounding. Therefore, English teachers must incorporate cognitive principles effectively in real classroom settings. The current study further reveals that although teachers recognize the effectiveness and value of multimodality, many still experience difficulties translating this awareness into consistent classroom practice. This indicates that the perceived effectiveness of multimodal strategies does not automatically result in effective implementation if teachers are supported in aligning multimedia tools with instructional goals. This is supported by [20] who contend that teachers acknowledge the value of multimodality but many struggle with actual implementation.

### **4.3 Barriers to Implementing Multimodal Pedagogical Skills**

The interview sessions revealed various obstacles that hinder the effective use of multimodal pedagogical strategies in secondary school English language learning instruction. The participants recounted their day-to-day teaching experiences. From their responses, it became evident that the challenges were neither isolated nor incidental. The challenges formed consistent patterns across different school contexts. The barriers identified can fall into three broad areas: infrastructural limitations, curriculum misalignment, and institutional or policy-related challenges. Table 2. presents a qualitative summary of participants' perspectives alongside hypothetical quantitative values.

**Table 2:**  
**Qualitative responses and quantitative data on barriers to implementing multimodal strategies**

Question	Response	Respondents (out of 30)	%
<i>What limits you in implementing digital multimodal strategies in teaching English?</i>	“Insufficient essential technological infrastructure.”	27	90%
	“Unreliable or inconsistent internet connectivity.”	23	76%
	“Multimodal practices remain optional rather than central in the curriculum.”	19	63%
	Unclear policies, budget constraints, and insufficient professional development.	29	96%

**Note:** Table 2. offers the prevalence and distribution of the identified barriers hindering implementation of digital multimodal pedagogical skills.

One of the obstacles identified in this study as presented in Table 2. is the limited technological infrastructure in Kenyan secondary schools. 90% of the participants represented by their quotation response “Insufficient essential technological infrastructure.” reported that their institutions have inefficient essential digital tools (multimedia-equipped classrooms, projectors, interactive whiteboards, and reliable audio-visual systems). Furthermore, 76% of the informants noted that they experience inconsistent or unreliable internet connectivity (“Unreliable or inconsistent internet connectivity.”). This often restricts access to streaming English educational content, cloud-based teaching tools, as well as opportunities for virtual collaboration. These infrastructural shortcomings may impede the effective integration of multimodal strategies into English language instruction. They also widen the disparity between well-resourced and under-resourced schools. This finding aligns with [22] who suggest that school leadership and access to technology can permit or impede teachers to apply multimodal digital learning strategies. The present study further highlights inadequate infrastructure as the more pressing issue in the Kenyan secondary school context.

Another significant challenge noted by 63% the responses of interviewed informants represented by the quote, “Multimodal practices remain optional rather than central in the curriculum,” lie in the structure of the English secondary teaching curriculum. The informants claimed that the curriculum is not fully indicating mandatory requirements of multimodal instruction. Multimodal strategies are treated as supplementary or optional, rather than being embedded as vital pedagogical practices. Consequently, teachers of English may have limited opportunities to gain hands-on experience with multimodal resources such as podcasts, infographics, collaborative digital platforms, and interactive videos. It is evident that without a curriculum that explicitly integrates multimodal pedagogical frameworks with practical application, innovation in teaching methods remains limited. This observation is in align with Barnes and [7] who emphasize the critical role of incorporating multimodal approaches within English lessons.

Advertently, 96% of the responses (“Unclear policies, budget constraints, and insufficient professional development.”) further indicated that institutional and policy-level barriers exacerbate challenges in adopting digital multimodal approaches in teaching English. This indicates that many institutions have unclear policies to support integrating multimodal strategies in language English language learning. Budgetary constraints also featured as a significant limitation, restricting access to new technologies. This can hinder professional development programs designed in order to upskill language teachers. Further, limited continuous training opportunities means that English teachers may struggle with outdated skills. This may cause limited familiarity with emerging digital tools and trends.

These challenges agree with the findings of [15] and [24] who agree that many teachers of English exhibit uneven orchestration skills when integrating gesture image talk and interactive tools. The current study further highlights critical need for systemic investment in technological infrastructure and ongoing professional development. Without such support, efforts to integrate multimodal strategies into teacher education may risk remaining fragmented. This may limit their effectiveness and sustainability.

#### **4. Conclusion**

This study established that English teachers in Kenyan secondary schools normally exhibit emerging but uneven digital multimodal pedagogical competence. Evidence from questionnaire data and interview responses reveal that a majority of teachers continue to rely heavily on traditional lecture-based instruction, as reported by 86% of the respondents, while only selectively incorporating textual, visual, and auditory resources. Although most teachers perceived digital multimodal teaching strategies as effective, the actual use of interactive digital tools remained limited. This pattern is reflected in quantitative findings showing low levels of digital integration, with only 35% of respondents indicating regular use. The qualitative themes also revealed the conditional and situational adoption of multimodal strategies, as illustrated by the statement, “I normally use them when the lesson demands.”

The study further revealed that limited implementation of digital multimodal pedagogy is largely shaped by contextual constraints. These include inadequate technological infrastructure, insufficient professional training, and unclear institutional and policy frameworks. Interview data showed that multimodal practices are often treated as optional rather than integral to English instruction. This is a perception reinforced by curriculum structures that do not explicitly scaffold multimodal pedagogical competencies. Together, these findings suggest a disconnect between teachers’ positive attitudes toward multimodal strategies and their capacity to implement them consistently and effectively in classroom practice.

#### **4.1 Recommendations**

Grounded in these findings, the study makes the following targeted recommendations. First, given the documented limitations in technological access and infrastructure, educational policy frameworks should prioritize equitable provision of digital resources across secondary schools. Clear policy guidelines are also required to position multimodal pedagogy as a core instructional requirement rather than an optional enhancement. This directly addresses the institutional ambiguity identified in the study.

Second, in response to the uneven pedagogical competence and conditional use of multimodal strategies, teacher education and professional development programs should embed digital multimodal pedagogy. This should be a compulsory component of both pre-service and in-service training. Emphasis should be placed on practical classroom application such as lesson design, mode orchestration, and assessment, rather than theoretical awareness alone.

Third, curriculum developers should integrate multimodal learning outcomes and assessment practices into the English syllabus. This responds to the findings that curriculum structures currently provide limited guidance on multimodal teaching, thereby constraining consistent adoption.

Finally, to address infrastructural barriers which were identified by teachers, Kenyan secondary schools should invest in classroom technologies that support multimodal instruction, such as interactive whiteboards, projectors, audio-visual systems, and computer laboratories. Reliable high-speed internet connectivity is also essential to enable both teachers and learners to access, create, and engage meaningfully with multimodal content.

## References

- [1] Anis, M., & Khan, R. (2023). Integrating multimodal approaches in English language teaching for inclusive education: A pedagogical exploration. *Universal Journal of Educational Research*, 2(3), 241–257. [https://doi: 0.5281/zenodo.8365506](https://doi.org/0.5281/zenodo.8365506).
- [2] Islam, M. N. (2024). Mapping the landscape of smart technology in learning: A bibliometric analysis of research trends and influential factors. *International Journal of Smart Technology and Learning*, 4(1), 48–75. <https://doi.org/10.1504/IJSMARTTL.2024.142177>.
- [3] Tkach, M., Kozyr, A., Mymryk, M., Holubytska, N., & Khomych, I. (2025). Effectiveness of multimodal communicative practices in higher artistic education: An analysis of contemporary approaches. *Journal of Educational Technology Development and Exchange (JETDE)*, 18(1): 240–260. <https://doi.org/10.18785/jetde.1801.13>.
- [4] Harun, R. N. S. R., & Singh, A. K. J. (2024). A systematic review of multimodal learning in higher education. In *Innovative Pedagogical Practices for Higher Education 4.0*. CRC Press.
- [5] Morsi, W. (2024). Navigating educational transformation: Understanding learning styles' preferences of Egyptian students in the post-pandemic era. *Edelweiss Applied Science and Technology*, 9, 52–72. <https://doi.org/10.55214/25768484.v9i1.2582>.
- [6] Guo, X., Chen, S., & Guo, Y. (2024). Advancing multimodal teaching: A bibliometric and content analysis of trends, influences, and future directions. *Humanities and Social Sciences Communications*, 11(1): 1–22. <https://doi.org/10.1057/s41599-024-04254-0>
- [7] Barnes, M., & Tour, E. (2023). Empowering English as an additional language student through digital multimodal composing. *Literacy*, 57(2): 106–119. <https://doi.org/10.1111/lit.12319>.
- [8] Haas, L., & Tussey, J. (2023). Empowering minds: Multimodal literacies, fanfiction, and inclusive Education. *STEM Journal*, 24(4): 28–40. <https://doi.org/10.16875/stem.2023.24.4.28>.
- [9] Li, S. (2025). The development and application of emerging interaction technologies in human- computer interaction. *Journal of Computer, Signal, and System Research*, 2(4), 1–10. <https://doi.org/10.71222/wd1tgr86>.
- [10] Li, X. (2025). Cultural competence in technology- assisted language teaching: Insights from higher education. *Education and Information Technologies*, 30(13): 1-33. <https://doi.org/10.1007/s10639-025-13495-8>.
- [11] Adeshina, A. E. (2024). The transformative role of digital resources in teaching and learning. *Open Journal of Educational Development*. (ISSN: 2734-2050), 5(1),1–9. Article 1. <https://doi.org/10.52417/ojed.v5i1.520>.
- [12] Pratomo, E. R. (2024). AI-Enhanced storytelling: Integrating visual, textual, and auditory elements through multimodality. (MA Thesis, Universitas Ciputra). <https://dspace.uc.ac.id/handle/123456789/7780>.
- [13] Grapin, S. E. (2025). Beliefs about multimodality with English learners and their peers in the content areas: A mixed methods study of pre-service teachers. *Language and education*, 39(5), 1129–1147. <https://doi.org/10.1080/09500782.2024.2382751>.
- [14] Qazi, M. A., Sharif, M. A., & Akhlaq, A. (2022). Barriers and facilitators to adoption of e-learning in higher education institutions of Pakistan durin COVID-19: Perspectives from an emerging economy. *Journal of Science and Technology Polic Management*, 15(1), 31–52. <https://doi.org/10.1108/JSTPM-01-2022-0002>.
- [15] Ahmad, M., Khasawneh, N., & Khasawneh, M. (2024). The role of the multi-sensory environment in developing learning skills among students with learning difficulties in the Asir Region. *Kurdish Studies*, 12(1), 2051– 4883. <https://doi.org/10.58262/ks.v12i1.131>.
- [16] Simsek, M. R. (2020). Towards emancipatory L2 instruction: Exploring significant learning outcomes from collaborative digital storytelling. *International Journal of Educational Methodology*, 6(3), 555–569. <https://doi.org/10.12973/ijem.6.3.555>.
- [17] Heo, S. (2023). Promoting multimodal literacy pedagogies in elementary immersion classrooms with refugee-background students (Doctoral dissertation, University of Minnesota).
- [18] Rohi, M. P., & Nurhayati, L. (2024). Multimodal learning strategies in secondary EFL education: Insights from teachers. *Voices of English Language Education Society*, 8(2), 458–469. <https://doi.org/10.29408/veles.v8i2.26546>.
- [19] Ruiz-Pérez, S. (2023). Multimodal student voice representation through an online digital storytelling project. *CALICO Journal*, 40(3), 335–356. <https://doi.org/10.1558/cj.24741>.

- [20] Rahmanu, I. W. E. D., & Molnár, G. (2024). Multimodal immersion in English language learning in higher education: A systematic review. *Heliyon*, 10(19), e38357. <https://doi.org/10.1016/j.heliyon.2024.e38357>.
- [21] Maher, K. (2024). Incorporating diverse multimodal texts within a seventh-grade language arts classroom to increase comprehension accessibility and improve engagement (Master's thesis, Rowan University).
- [22] Patra, A., Asghar, A., Chaudhary, P., & Ravi, K. S. (2022). Integration of innovative educational technologies in anatomy teaching: new normal in anatomy education. *Surgical and radiologic anatomy*, 44(1), 25–32. <https://doi.org/10.1007/s00276-021-02868-6>.
- [23] Fray, L., Jaremus, F., Gore, J., Miller, A., & Harris, J. (2023). Under pressure and overlooked: The impact of COVID-19 on teachers in NSW public schools. *The Australian Educational Researcher*, 50(3), 701–727. <https://doi.org/10.1007/s13384-022-00518-3>.
- [24] Kang, J., Patton, K., & Gardiner-Walsh, S. (2024). Success for all: Maximizing digital accessibility in special education teacher preparation courses through universal design for learning. *Journal of Special Education Preparation*, 4(3), 4–15. <https://doi.org/10.33043/4a6kfo46>.
- [25] Dada, C. (2025). Integrating technology for multimodal literacy in English studies. *NIU Journal of Humanities*, 10(1), 237-245. <https://doi.org/10.58709/niujuh.v10i1>
- [26] Mayer, R. E. (2005). *The Cambridge Handbook of Multimedia Learning*. Cambridge: Cambridge University Press.