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# Language Learning Strategies Used by Malaysian ESL Students to Improve English Communication: A Systematic Literature Review

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**Abstract.** Communication in English has long been recognised as one of the most challenging skills for pupils learning the language. Many studies in recent years have also emphasised the relevance of English communication abilities. With the advancement of technology in our current day, kids may learn communication skills through a variety of tools. As a result, determining the learning approaches used by pupils to build their English communication talents is crucial. A systematic literature review is undertaken in this study to investigate the prevailing language learning approaches utilised by Malaysian pupils acquiring English as a Second Language (ESL). Four databases were utilised to obtain the publications that were analysed: Scopus, Science Direct, Web of Science (WoS), and Google Scholar. The articles that met the eligibility criteria were published between 2020-2023. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) is the methodology utilised in this review. Metacognitive and cognitive processes were the most frequently utilised methods for improving speaking abilities, followed by compensatory and social approaches, according to the data. Memory and emotive methods, on the other hand, were the least used by pupils. The new study might assist teachers in selecting the best teaching method for future modern classrooms. The applicability of learning strategies for different learning skills may be extensively studied in future studies.

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## 1. Introduction

English proficiency has become a highly prized ability in the job market due to its significant role in job searches (Ramamurthy et al., 2021). Gaining insight into the cognitive processes employed by accomplished students is essential for cultivating proficient communicators in youngsters. An investigation was carried out to examine the language acquisition techniques utilised by different learners since they exhibit variations in their approaches. Researchers have noted that the utilisation of regularly employed learning approaches often enhances the performance of language learners (Adi et al., 2019). Understanding the learning methodologies that students use to improve instruction and the development of exceptional language learners is therefore critical (Lestari & Fatimah, 2020).

It is imperative to acknowledge that individuals' learning strategies are substantially influenced by the environment in which they reside. Learners must adjust to the changing teaching strategies as they change to match the present learning environment (James et al., 2019). Recent studies show that more technologically enhanced teaching techniques have gradually replaced the conventional chalk-and-talk approach. Digital tools were used in a technology-enhanced environment, and students had more learning flexibility (Healey, 2018). The use of appropriate technologies in language exercises increases students' self-confidence and inspires them to communicate in English fluently (Azlan et al., 2019).

Moreover, the presence of interactive media increases students' enthusiasm for engaging in language learning activities. As a result, technology may be considered to both encourage students and provide an exciting learning environment (Pazilah et al., 2019). Learners are also able to adjust to their new learning environment, especially in light of the COVID-19 outbreak, due to the abilities they have acquired through experience with creative teaching practices. Everyone is presently studying at a different location because of COVID-19. The sudden change from an in-person classroom setting to an online one has made teachers more concerned about their students' efficient learning strategies. Students have more autonomy over the learning process and may set their own pace of learning (Kehing & Yunus, 2021).

Aside from that, a supportive environment helps pupils learn and perform better (Doraisamy, 2021). Students who are cut off from their teachers engage in autonomous learning, where they are required to assume accountability for their education (Md Yunus et al., 2019).

In recognition of the significance of effective teaching strategies for language learning, our study aims to contribute valuable insights to educators. The primary goal is to conduct a systematic literature review on language learning strategies, seeking to identify the strategies used in language learning and explore their

impact on deep learning in ESL contexts. This comprehensive examination, following the PRISMA protocol, thoroughly explores the strategies employed by language learners. Additionally, we aim to address the following specific research questions:

RQ 1: What are the strategies used in language learning?

RQ 2: What is the impact of ESL strategies on deep learning?

Through a thorough exploration of these questions, our study seeks to provide a holistic understanding of language learning strategies and their effects. Not only does the research identify effective strategies, but it also offers practical guidance for educators, aiding in the selection of the most impactful approaches for enhanced deep learning outcomes in ESL contexts.

## 2. Literature Review

### Language Learning Strategies

A substantial body of research on learning techniques has been completed in recent years (Aziz & Shah, 2020; Dawadi, 2017; Oflaz, 2019; Pietra, 2020; Rusli et al., 2018; Salam et al., 2020; Wael et al., 2018; Zakaria et al., 2018). It is certainly not new to talk about in the education field. The transition of the classroom from conventional settings to technological integration has made teachers anxious about how language learners are learning (Kehing & Yunus, 2021). The term "language learning strategies" – which is based on individual traits, styles, and tactics – has long been linked to successful language learners (Oxford, 1990).

Nevertheless, it is now practically hard to analyse the characteristics, learning styles, and instructional strategies of today's pupils due to the way technology has been integrated into the teaching and learning process. Less comprehensive explanations, pronunciation corrections, prompt feedback, and translations of new vocabulary contribute to the limited contact between students and teachers while learning a language online (Zuzana & Betak, 2021). Hence, how online language learners self-regulate their studies challenges the traditional notion of an accomplished language learner (Hromalik & Koszalka, 2018). A consensus among academicians is that before implementing classroom strategies, instructors must determine the language learning style of their pupils (Aziz & Shah, 2020; Lahpai, 2019; Zakaria et al., 2018).

With greater precision, educators should determine which language learning techniques are appropriate for use in an online learning environment in the technologically advanced, contemporary world. This is done to guarantee that the methods are appropriate for acquiring a new language. Further online learning sessions were required to ascertain the students' learning strategies (Zuzana & Betak, 2021). More learning techniques were used by students, and they did better than fewer strategies, (Wahyu & Subekti, 2017). Students' employment of learning techniques affects their ability to learn as well since those who do so are considered exceptional language learners (Chanderan & Hashim, 2022; Oxford, 1990, 2017; Pawlak, 2021).

Chanderan and Hashim (2022), Oxford (1990, 2017), and Pawlak (2021) distinguished between direct and indirect strategies as two distinct types of tactics. Metacognitive, emotive, and social strategies are included in indirect techniques, whereas memory, cognition, and compensatory processes are utilised in direct approaches. These strategies support learners in organising and assessing their learning process so that they can gain an understanding of the approaches they employ to acquire new languages. Since language learners employ a range of ways, teachers should first investigate the tactics that they are using to ensure that their students can align their learning strategies with the methods being taught. To help TESL students become more proficient communicators in English, this study will look at the language learning techniques they employ.

The study's theoretical foundation rests on Oxford (1990) a language learning strategies system, encompassing cognitive, memory, metacognitive, compensatory, affective, and social strategies. These strategies aim to enhance language learning outcomes. The conceptual framework applies these strategies through Anderson (1983) the Adaptive Control Thought Model, delineating declarative and procedural stages in cognitive skill development. Motivated by various factors, learners navigate dynamic language acquisition, emphasizing the need for a nuanced understanding of strategy usage (Barrouillet et al., 2007).

### **3. Methodology**

#### **Design**

Following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) standards (Page et al., 2021), a comprehensive literature search was conducted. The process comprised four stages: identification, screening, eligibility, and inclusion criteria. The search strategy encompassed various sources to minimize bias. A meticulous definition of inclusion criteria ensured the relevance and quality of selected studies, adhering to PRISMA guidelines for transparency and replicability. This approach contributes to the methodological rigour of the review.

#### **Data Search and Eligibility Criteria**

Scopus served as the primary database for this study's data collection and in-depth examination of the learning techniques employed by TESL students to enhance their English communication abilities. Scopus, one of the most extensive abstract and citation databases available, is primarily concerned with local and international social science publications (Singh et al., 2021). Furthermore, three additional databases were employed, which not only comprise the most extensive collections of published information and effect indicators but also outperform other databases in these respects. Google Scholar, Web of Science (WoS), and Science Direct are online databases (Chertow et al., 2021). Sufficient coverage robustness is offered by all four datasets to enable further in-depth transdisciplinary comparisons.

A pre-established system was developed to facilitate the selection and screening of data, clearly defining the determinants of exclusion and inclusion. The current

study examined the empirical and systematic review articles that were released between 2020 and 2023. As a result, prior review articles in the form of books, chapters, and proceedings were excluded. The study is in the field of social science or the arts and humanities, particularly in the areas of language learning strategies and English as a Second Language (ESL). Furthermore, the articles that are included are in English only. The articles written in other languages were eliminated. Table 1 presents the search string for eligibility criteria and exclusion.

**Table 1. Eligibility Criteria and Exclusion**

Criterion	Eligibility	Exclusion
Timeline	Between 2020 to 2023	<2020
Literature Type	Empirical, Systematic	Books, Chapters, Proceedings
Language	Review	Non-English
Scope	English	Not related to the topics of LLS and ESL
	Related to LLS and ESL	

More precisely, in the present study, the keywords for searching were “LLS”, “ESL”, and “English communication”. To conduct a more thorough document search, the TITLE-ABS-KEY index was used. Table 2 shows the search string for each database employed in this review study.

**Table 2. The Search String employed during the systematic review process**

Database	Keyword Used
Scopus	TITLE-ABS-KEY (“language learning strategies” AND “English as a Second Language” OR “ESL” OR methods” AND “English communication”))
Web of Science	TS = (“language learning strategies” OR “methods” AND “English as a Second Language” OR “ESL” AND “English communication”))
Science Direct	language learning strategies AND ESL OR English communication
Google Scholars	language learning strategies AND ESL OR English communication

Following the retrieval of the search results, a protocol-based priority filter was applied to the database system. Because they had no relevance to the study, records without these terms in the titles, abstracts, or keywords were disregarded throughout the screening procedure. Upon completion of the screening process, every duplicate record was eliminated from every level.

This review comprises papers that met the qualifying criteria and were relevant to the research concerns. Examining language learning techniques for English communication is the main driving force. The findings in the included review, most of which are referenced (Chanderan & Hashim, 2022; Oxford, 1990, 2017;

Pawlak, 2021), implicitly explain the theoretical framework of language acquisition processes. Therefore, works that had nothing to do with the theoretical framework were left out of this study. The results were closely scrutinised to ensure that the study question was fully discussed and evaluated.

### **Data Screening and Extraction**

To prevent unforeseen errors while using an automated screening method, all data underwent manual validation throughout the screening process. The records were initially examined, utilising the titles, keywords, and abstracts as a source of advice. The designation of invalid articles was then made. After the screening finished, the researcher went over the assessments and decided on the results. Then the researcher searched for any remaining data and obtained the complete articles. The subscription database facilitated the researchers' ability to retrieve the complete textual content of the data. To obtain comprehensive results, it is important to adhere to the screening criteria established in the initial phase. The final phase entailed pulling the pertinent data from the offered reports to tackle the research inquiries made in the review.

Figure 1 depicts the outcomes of the data screening and collection procedure based on identification, screening, and inclusion criteria. There are 464 records from four databases. Scopus (n = 46), Web of Science (n = 46), Science Direct (n = 90), and Google Scholar (n = 282) have them. There were 310 records eliminated before screening from 464 entries owing to duplication (n = 197), ineligibility (n = 79), and irrelevant (n = 34). During the screening phase, 154 records were reviewed, with 87 records being eliminated because they did not fit the suggested criteria. At this stage, the total number of records sought for retrieval is 67 from the previous records screened minus records excluded. After considering the eligibility of full text, 32 records were not retrieved because the researcher was unable to get full access to the studies.

Consequently, 35 records were assessed for eligibility. However, this screening stage also took an exclusion process, in which several more reports were excluded due to not being related to language learning strategies (n = 4), not in a Malaysian setting (n = 3), and not discussing English communication (n = 5). Finally, the last stage includes 23 records as included studies to be reviewed in the current research.

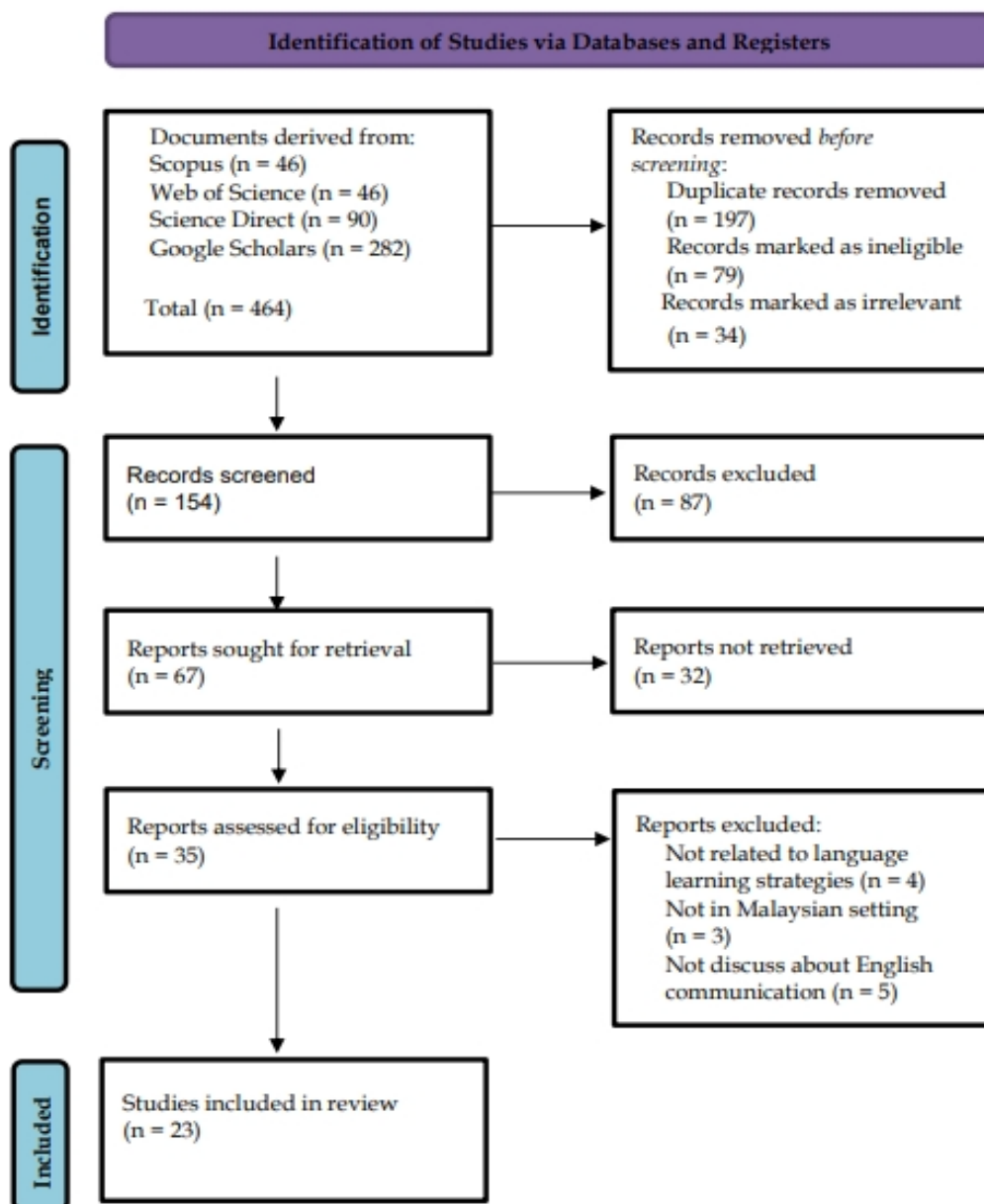


Figure 1: PRISMA Diagram of the Selected Studies

#### 4. Findings and Discussion

##### Article Reviewed Based on Journals

The search terms were explicitly referenced in 23 articles through publications. Table 3 provides a comprehensive list of journals together with their respective years of publication.

**Table 3. Article Reviewed Based on Journals**

Journal	2020	2021	2022	2023
Journal of Personalized Learning	1	0	0	0
Creative Education	1	2	2	0
International Journal of Evaluation and Research in Education	1	0	0	0
International Journal of Academic Research in Progressive Education and Development	0	1	0	1
European Journal of Educational Research	0	1	0	0
International Journal of Academic Research in Business & Social Sciences	0	6	1	1
International Journal of New Technology and Research	0	1	0	0
Sustainability	0	0	1	0
Journal of Nusantara Studies	0	0	1	0
Malaysian Journal of Social Sciences and Humanities	0	0	1	0
Theory and Practice in Language Studies	0	0	0	1

As can be seen in Table 3, out of 23 selected studies, there are 3 publications in 2020, 11 publications in 2021, 6 publications in 2022, and 3 publications in 2023. The number of publications about language acquisition techniques among ESL students had a rise in 2021, followed by a notable decline in both 2022 and 2023. Meanwhile, the top two journals that published the topic under study are the *International Journal of Academic Research in Business & Social Sciences* ( $n = 8$ ) followed by *Creative Education* ( $n = 5$ ).

### Study Design and Subject Participants

In terms of study design, most of the reviewed studies are quantitative in nature using survey questionnaires ( $n = 16$ ) (Adan & Hashim, 2021; Aziz & Shah, 2020; Chandaran & Hashim, 2022; Dawi & Hashim, 2022; Omar et al., 2020; Ghulamuddin et al., 2022; Hanafiah et al., 2021; Jais et al., 2022; John et al., 2021; Lim et al., 2021; Min et al., 2021; Nair et al., 2021; Ooi et al., 2021; Sani & Ismail, 2021; Vimalakshan & Aziz, 2021; Zamani et al., 2023)

The qualitative studies ( $n = 6$ ) comprise of literature review (Aziz & Kashinathan, 2021; Kathirvel & Hashim, 2020; Kehing & Yunus, 2021; Ramalingam et al., 2022), focus group interview (Othman et al., 2022), interview, and observation (Zahidi & Ong, 2023). Meanwhile, only one study ( $n = 1$ ) uses a mixed-methods approach in study design (Kamaruzaman et al., 2023). Table 4 presents the study design and subject participants for all 23 reviewed articles.





are more inclined to attain academic achievement. The language learning approaches are listed in Table 5.

**Table 5. Strategies Used in Language Learning**

Author(s) and Year	Language Learning Strategies
(S. N. S. M. Aziz & Shah, 2020) (Kathirvel & Hashim, 2020) (Fatimah et al., 2020)	Cognitive Strategy, Metacognitive Strategy The Use of Audio-Visual Materials Interactive Language Learning Activities
(Adan & Hashim, 2021) (A. A. Aziz & Kashinathan, 2021) (Hanafiah et al., 2021) (John et al., 2021) (Kehing & Yunus, 2021)	Metacognitive Strategy, Compensation Strategy Cooperative Learning, Interactive Learning Metacognitive, Social, Memory, and Cognitive Strategies Metacognitive Strategy, Memory Strategy
(Mason et al., 2021) (Min et al., 2021) (Nair et al., 2021) (Ooi et al., 2021) (Sani & Ismail, 2021) (Vimalakshan & Aziz, 2021)	Metacognitive, Cognitive, Compensation, and Social Strategies Cognitive Strategy, Memory Strategy Memory Strategy, Affective Strategy Memory Strategy, Social Strategy Switching Momentarily to a Native Language Compensation Strategy, Cognitive Strategy Metacognitive Strategy
(Chanderan & Hashim, 2022) (Dawi & Hashim, 2022) (N. J. A. Ghulamuddin et al., 2022) (Jais et al., 2022)	Metacognitive, Cognitive, and Social Strategies Affective Strategy, Cognitive Strategy Compensation, Metacognitive, and Cognitive Strategies Memory, Cognitive, Compensation, Metacognitive, Affective, and Social Strategies
(Othman et al., 2022) (Ramalingam et al., 2022)	Metacognitive, Cognitive Strategies Collaborative, Technology-Based Learning
(Kamaruzaman et al., 2023) (Zahidi & Ong, 2023) (Zamani et al., 2023)	Metacognitive, Cognitive Strategies Self-Regulated Learning Strategies Cognitive, and Social Strategies

As indicated in Table 5, several studies emphasised distinct approaches to language acquisition, including those suggested by (Oxford, 2017; Pawlak, 2021), such as the use of audio-visual materials (Kathirvel & Hashim, 2020), interactive language learning activities (Omar et al., 2020), cooperative learning and interactive learning (Aziz & Kashinathan, 2021), switching momentarily to native language (Ooi et al., 2021), collaborative and technology-based learning (Ramalingam et al., 2022), and self-regulated learning strategies (Zahidi & Ong, 2023).

In light of the dynamic and constantly evolving learning environment, the application of learning approaches has shifted in recent years. For example, the findings of the (Aziz & Shah, 2020) study revealed that students used low-to-medium-level approaches. The study's strategy use was examined, and the results revealed that polytechnic students chose metacognitive and cognitive methods over emotional and compensating techniques. Except for memory methods, which women reported using substantially more frequently than men, There were no statistically significant differences in the utilisation of any of the six categories, according to the results of this survey. The findings of this study might show that women are better at memorising than men, which could also be a reflection of women's general abilities.

To improve ESL students' speaking abilities, teachers in the twenty-first century have created several ICT-based teaching and learning strategies, as claimed by Kathirvel and Hashim (2020). One method to enhance speaking skills is to employ audio-visual resources. An effective technology-based approach that has been used with ESL students is the audio-visual resource. It is thus predicted that this method will assist ESL students in developing their speaking skills. Consequently, the benefits of employing audio-visual resources and their role in enhancing speaking abilities are covered in this essay. Additionally, the results of a study by Omar et al. (2020) revealed that the English language speaking proficiency of learners is influenced by self-assurance, motivation, and the learning environment, suggesting that interactive language learning activities can overcome communication-related issues in language classrooms. Consequently, interactive language learning activities improved learners' fluency in spoken English.

According to research by Adan and Hashim (2021), students at art schools utilise the Metacognitive method as their most common language learning strategy (LLS) and the Compensation Strategy as their least common LLS. According to this report, most ESL students in Malaysia struggle to achieve a certain level of fluency and mostly rely on their instructors. They don't know that they have the power to direct their education. It is essential to choose suitable LLSs as they enhance learners' efficiency in acquiring a second language. Educators and students must be cognizant of one another's assets and preferences in this circumstance. Speaking English might be difficult for ESL students due to both external and internal obstacles (Aziz & Kashinathan, 2021). Thus, proficient language learners are conscious of the methods they use to acquire the language. They may provide their students with a variety of excellent English language learning practices, which may benefit both of them as successful language learners (Hanafiah et al., 2021).

Moreover, John et al. (2021) contended that among upper-secondary ESL learners, the metacognitive technique is the most often employed LLS. Accordingly, Kehing and Yunus (2021) it included social and compensatory methods after adding cognitive strategy (Lim et al., 2021; Min et al., 2021; Nair et al., 2021). However, (Ooi et al., 2021), the majority of teenage ESL students in Malaysian secondary schools rely more on their mother tongue to communicate in English and employ little to no tactics for learning the language. An additional noteworthy discovery reveals that metacognitive strategies are being utilised more frequently by male students than by female students (Sani & Ismail, 2021). In the context of further research, the findings of studies conducted by Othman et al. (2022), Zamani et al. (2023), Dawi and Hashim (2022), Ghulamuddin et al. (2022), Jais et al. (2022), Kamaruzaman et al. (2023), Zahidi and Ong (2023), Ramalingam et al. (2022), Vimalakshan and Aziz (2021), Chanderan and Hashim (2022) collectively suggest that people tend to use more metacognitive and cognitive techniques than social and affective strategies.

## **RQ2: What is the impact of ESL strategies on deep learning?**

The majority of research that has been examined on language learning procedures has employed the language learning methodologies put out by Chanderan and Hashim (2022) and Pawlak (2021). The framework has six components, namely:

(1) metacognitive techniques, (2) cognitive strategies, (3) compensating strategies, (4) social strategies, (5) memory strategies, and (6) affective strategies.

- (1) **Metacognitive Techniques:** Students become more independent when metacognitive strategies are applied. Furthermore, students are conscious of the methods of learning that are used in the process. Not only can they evaluate themselves, but they can also plan and arrange their learning tactics. Independent learners are good language learners. By complimenting underachievers, they may be motivated to improve. They gain awareness of their learning methods, enabling self-evaluation, planning, and organization of learning tactics. Adan and Hashim (2021) and John et al. (2021) demonstrated that metacognitive strategies significantly contribute to learners' independence and self-awareness. Ooi salah
- (2) **Cognitive Strategies:** Learners used cognitive skills to practice sending and receiving messages, as well as to create sentence structures by taking notes. Learners practice by mimicking, using noises, and practising naturally. Additionally, cognitive techniques assist students in expanding their vocabulary. According to Kehing dan Yunus (2021), Ooi et al. (2021) and Sani & Ismail (2021), cognitive strategies, including mimicking and natural language practice, are effective for message production and sentence structure creation.
- (3) **Compensating Strategies:** Another way to help language learners get beyond obstacles to language proficiency is through compensation tactics. When pupils run out of words, they use synonyms, mime, or gestures to express their thoughts. The findings showed that when students used spoken compensatory methods, they were aware of their language limitations. Adan and Hashim (2021) and Sani and Ismail (2021) demonstrated that compensatory methods, such as using synonyms and gestures, are effective in overcoming language barriers.
- (4) **Social Strategies:** Students who use their social skills are more talkative and actively look for chances to speak in English. In the classroom, role-playing activities might be a useful way to practice language. Kehing and Yunus (2021) found that social strategies, including role-playing activities, positively influence students' willingness to actively engage in English conversations.
- (5) **Memory Strategies:** In general, memory techniques were the least useful for speaking abilities. Students use mental techniques for recall, use pictures and sounds, review information, and take action. These tactics help pupils visualize new words by combining sounds and imagery. Thus, only a small number of findings identified memory techniques as the most often employed speaking techniques. Jais et al. (2022) noted that memory strategies, such as mental recall and reviewing information, contribute to the visualization of new words by combining sounds and imagery.

- (6) **Affective Strategies:** Since English language learners paid less attention to the emotional aspects of the language, affective methods were placed less of emphasis. With the assistance of successful learners, students learn more effectively in a supportive learning environment. Adult learners, however, gave effective methods less attention. According to Dawi and Hashim (2022), affective strategies play a crucial role in creating a supportive learning environment, particularly for successful learning outcomes.

## 5. Conclusion

In conclusion, this comprehensive systematic literature review delved into the practices employed by ESL pupils to enhance their English communication skills through various language learning methodologies. The authors emphasized the significance of bridging knowledge gaps within existing language learning methodologies, with a particular focus on metacognitive and cognitive processes as prevalent learning methods. The outcomes of the study highlighted that learners are increasingly acquiring speaking abilities with greater independence in the new learning environment, especially those employing metacognitive strategies, showcasing heightened motivation and self-regulation. Moving forward, it is imperative to extend the scope of research to investigate how virtual learning impacts communication skill acquisition, given the rising prevalence of online learning environments. For practical implications in the Malaysian education system and beyond, educators should consider categorizing learners' strategies to determine suitable online instructional methods, facilitating the development of exemplary language learners. This approach not only aligns with the evolving learning landscape but also aids instructors in tailoring effective instructional approaches for diverse classrooms.

However, it is crucial to acknowledge limitations. The study's focus on speaking skills should be extended to encompass other language skills, including reading, listening, and writing, to provide a more holistic understanding of language learning abilities. Additionally, the constraints of the investigation, such as the limited number of studies and databases examined, should be addressed in future research endeavours. Furthermore, the influence of the environment, and national, and local culture on research findings requires in-depth analysis. The ratio of language skills and language theories should be explored, and a critical comparative analysis with other courses on language learning skills would contribute to a more comprehensive understanding. Lastly, the central core of research and new theories related to the study's findings should be expounded upon and strengthened, ensuring a robust foundation for future investigations in the realm of language learning skills.

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