A Systematic Review on Language Learning Strategies for Speaking Skills in a New Learning Environment

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Abstract: Speaking skills have always been regarded as the most difficult skill out of the four skills that learners should master in language learning. The importance of learning speaking skills has also been highlighted by many researchers in recent years. With the use of technology in this modern era, learners can learn speaking skills through various resources. Therefore, there is a need to identify the learning strategies used by learners for speaking skills in the new learning environment. In this review, the most frequently used strategies in language learning for speaking skills has been examined. The articles reviewed were from 2017 until 2021 across two databases, ERIC and Google Scholar. The PRISMA 2020 methodology is used in the review. From the review, it was found that meta-cognitive and cognitive strategies were most frequently used for learning speaking skills, followed by compensation and social strategies. The least used strategies by learners were memory and affective strategies. The findings help teachers to look for the most suitable teaching method in the current learning environment. For future research, an extensive review of the use of learning strategies for other learning skills could be carried out.

Keywords: Language learning strategies, PRISMA, speaking skills, systematic literature review.

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Introduction

The importance of communication for job hunting has made speaking as one of the most vital skills to master (Rammuruthy et al., 2021). To produce learners with good speaking skills, it is vital to know the successful learners' learning strategies. As the language learning strategies differ from one learner to another, studies were carried out to identify the strategies used by the learners. Researchers found that learners who used learning strategies in language learning are usually better learners (Adi et al., 2019). Hence, there is a need for awareness of learning strategies used by learners which could help improve teaching preference and the production of "good language learners" (Lestari & Fatimah, 2020).

Learning strategies used by learners is much influenced by the environment they live in. As the teaching methods changes with the current learning environment, learners also must adapt to the new learning methods (James et al., 2019). The traditional chalk-and-talk method has been gradually changed to more technology-advanced methods. In a technology enhanced environment, digital tools were used, and learners are more flexible to learn (Healey, 2018). With the integration of relevant technologies in language activities, it boosts the student's self-confidence as well as motivates them to be able to speak English fluently (Azlan et al., 2019). Learners are also more interested to participate in language learning activities. Therefore, it could be summarized that technologies do not only provide an interesting learning environment, but it also motivates learners (Pazilah et al., 2019). The skills gained through experiences in using new learning methods also eases the learners to deal with the new learning environment they are facing due to the Covid-19 pandemic.

The current Covid-19 pandemic has led everyone to a new learning environment. The drastic change from face-to-face to online learning environment rises the concern of teachers on the suitable learning strategies used by learners. Learners go through more independent learning and could self-regulate their own learning pace. Other than that, learners with good support in terms of the environment are able to succeed and learn better (Doraisamy, 2021). They took charge of their own learning, being away from the teacher which leads to autonomous learning where learners must take

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responsibility towards their own learning (Yunus et al., 2019). Therefore, there is a need to identify the learning strategies that are most frequently used by language learners for speaking skills during this pandemic.

In order to identify the most frequently used learning strategies for speaking skills, a literature review was done to help teachers determine the most suitable language learning strategies to be used in the new learning environment. A research question was built which is what are the most frequently used language learning strategies by students in learning speaking skills? This question acts as the guide in searching for the studies to be discussed in this review to look at the use of learning strategies in the current learning environment. Due to the change in the learning environment, the authors believe that there is a need to look at the most frequently used learning strategies in recent years.

**Literature Review**

**Language Learning Strategies**

In recent years, various studies have been conducted to study learning strategies (Alfian, 2021; Aziz & Shah, 2020; Dawadi, 2017; Dorand, 2020; Hashim et al., 2018; Ofaz, 2019; Salam et al., 2020; Wael et al., 2018; Zakaria et al., 2018). It is certainly not something new to talk about in the education field. However, the changes in learning environment from traditional settings to the integration of technologies nowadays have brought concern among teachers on the learning strategies used by language learners.

The phrase “language learning strategies” have always been related to “a good language learner”. A “good language learner” is described in terms of their “personal characteristics, styles and strategies” (Rubin, 1975). However, the incorporation of technology into the teaching and learning process has made it almost impossible to analyze the characteristics, styles and strategies used by learners in the current situation. Learners’ interaction with the teachers is also limited in learning language through online learning platform due to less profound explanation, correction of pronunciation, immediate feedback, and translation of unknown words (Sandorova & Betak, 2021). Therefore, “the traditional definition of good language learner is insufficient to describe how learners self-regulate their language learning online” (Hromalik & Koszalka, 2018).

Most researchers agree that teachers must first identify the students' language learning strategies before implementing the strategies to be used in the classroom (Aziz & Shah, 2020; Lahpai, 2019; Zakaria et al., 2018). In the current situation whereby the use of technology takes place, teachers should also identify the suitable language learning strategies to be used in an online learning setting. This is to ensure that the strategies are suitable to be used in learning a language. Therefore, more online learning sessions needed to be carried out to identify learners’ learning strategies (Sandorova & Betak, 2021). A study found that learners who used a lot of learning strategies scored higher compared to learners who used less learning strategies (Saputra & Subekti, 2017). The use of strategies in language learning also affects learners’ capability to be a good learner as learners with strategies in learning would be regarded as good language learners (Oxford, 1990).

Oxford (1990) divided the strategies into two parts, which are “direct strategies” which consist of “memory strategies, cognitive strategies and compensation strategies”; and “indirect strategies” which consists of “metacognitive strategies, affective strategies and social strategies”. These strategies help learners to organize and evaluate their learning process in order to understand their learning strategies used in language learning. Since language learners have different strategies used, teachers should first investigate the strategies used to ensure that the learners are able to match their learning strategies to the teaching approaches.

**Speaking Skills**

When compared to the other three core learning skills which are reading, writing, and listening, speaking is the most difficult to master (Rao, 2019). The learning of speaking skills requires learners to learn the proper grammar and vocabulary to use in speaking. Speaking also involves more than one person and can be considered as a productive skill (Wael et al., 2018). Therefore, learners take time to acquire these skills. The incompetency among learners especially those in higher learning institutions leads to poor oral proficiency to perform well at the workplace (Ramamuruthy et al., 2021). Hence, speaking skills is emphasized among learners at higher learning institutions.

The awareness of the importance of speaking skills led to various activities to enhance learners' speaking skills and to prepare them to face real life situations. Learners are exposed to presentations and group discussions to encourage them to practice speaking skills. Mock interviews were also carried out to expose learners to real interview sessions. These practices enable learners to be prepared for job interviews and to be able to perform well during the interview sessions (Rao, 2019). Besides that, exposures could help learners to know the importance of speaking skills and provide space for learners to practice their speaking skills (Wael et al., 2018).

Teachers play several roles in assisting learners in their speaking skills. Besides being an educator, teachers also act as facilitator, participant, motivator, and gives feedback when necessary (Wael et al., 2018). This could help learners to learn speaking skills better.

**New Learning Environment**
Digital platforms have been growing year by year and has been used by teachers and learners to communicate among each other (Yanus, 2018). Gradually, there has been a shift of teaching and learning methods from traditional to modern methods. The use of modern methods in the teaching and learning process, such as the use of technology has not only made learning fun, but also motivates learners to be involved in the learning process (Pazilah et al., 2019). In a study carried out by Azlan et al. (2019), Instagram is used in the teaching and learning process to develop learners’ speaking skills and motivation. The findings indicated that the use of Instagram has helped learners to improve on their speaking skills. In addition to that, Li (2019) found that interactive digital media created positive language learning strategies among learners as they showed improvement in their understanding of a concept.

In 2018, a study concerning language learning strategies indicated that memory strategies were the most frequently used strategies (Wael et al., 2018). Memory methods were dis-covered to be the most often used methods among learners in studies conducted by Kemala (2014) and Gursoy (2010) as cited in Wael et al., (2018). As studies were made in 2014 and 2010, there is a need to review articles on language learning strategies in 5 years back to identify whether the learning strategies still remain the same or if there has been a change due to the new learning environment. The authors identified the gap to further analyze the most frequently used learning strategies among learners in the recent years.

Methodology

The Preferred Reporting Items for Systematic Review and Meta-Analyses, also known as PRISMA 2020 checklist which comprises of 27 items is used in this systematic literature re-view. There were four phases in this review which are the identification phase, followed by the screening phase, eligibility phase, and lastly, the inclusion phase.

Phase 1: Identification Phase

In this study, two electronic databases, The Education Resources Information Center (ERIC) and Google Scholar were used in reviewing and analyzing the articles which were selected from 2017 until 2021. ERIC is a website offered free for public use which contains a thorough, Internet-based bibliographic and full-text database of education research and information that is simple to use and search. Google Scholar, on the other hand, gives free access to scholarly literature from a variety of publishing types and fields in the form of text or metadata. The keywords used while examining the articles from ERIC and Google Scholar were “language learning strategies” and “English speaking skills”.

Before commencing the review work, problems were specified. Questions were framed before starting with the review of the study to set the focus of the review. Studies related to the learning strategies used by students and speaking skills were reviewed. No limitations were set for the location of the respondents.

An extensive search for this study was done to identify relevant studies. Only computerized resources were used as there were limitations to get printed resources due to the pandemic and restriction orders. In this review, two critical steps were included which are (a) all related articles based on initial search were collected and (b) inclusion and exclusion criteria in choosing the articles were carried out. The inclusion and exclusion criteria were used in this review to examine the quality of previous studies. Studies that were to be included in this review were selected using the inclusion criteria after initial selection of articles were done. Among the criteria were suitability to the research question and the results of the study. Inclusion criteria included topics related to the keywords listed.

Phase 2: Screening Phase

Duplicates from ERIC and Google Scholar were detected and excluded during the screening process. The remaining papers were analyzed to see if they met the criteria established by the researcher earlier.

Phase 3: Eligibility Phase

Studies related to the research question were included in this review. The main reason is to look at the learning strategies used for speaking skills. Studies which were included in this review clarifies theoretical framework related to language learning strategies. Oxford (1990) and Chamot (1987) were referred in most of the studies. However, studies that were not related to the theoretical framework were excluded from this review. Much emphasis was given to the findings to ensure that the research question was thoroughly discussed and analyzed.

Phase 4: Exclusion Phase

As for exclusion criteria, articles which were not related to the limiters and keywords were excluded. Among the limiters set were English and full-text available. The reasons for exclusions were due to unrelated articles and articles which were not focused on speaking skills but rather on other learning skills such as listening, reading, and writing.

This search resulted in 33 results from ERIC and 314 results from Google Scholar. The articles were examined, and 70 studies were duplicated. 277 studies were screened, and 88 articles were excluded due to irrelevance such as dissertations, chapters, review paper and proceeding. 189 full-text articles were then assessed for eligibility. Out of 189 articles, 149 were excluded due to reasons such as referring to other learning skills and speaking skills in other languages.
The remaining 40 articles which were full papers were then assessed to select those related to language learning strategies and English-speaking skills. Figure 1 shows the whole selection process.

![Figure 1. The Process of Research Article Selection](image)

In summarizing the evidence of the studies, the strategies used for speaking skills were examined. The keywords while searching for the articles aimed to collect studies related to only the strategies for speaking skills. From the search done, 40 selected articles were used to be reviewed. The articles discussed about the language learning strategies used whereby most articles found different learning strategies were used by learners.

**Results**

After going through the four steps, there were 40 articles identified which were related to “language learning strategies” and “English speaking skills”. Among the language learning strategies used that were found, the most frequently used were meta-cognitive strategies, followed by cognitive strategies. The use of compensation strategies was also highlighted in the findings, followed by social strategies. The least preferred strategies were memory strategies, and affective strategies. The findings are as shown in Table 1.

**Table 1. The Learning Strategies Used by Learners**

| No. | Authors           | Study Design | Direct | Indirect |          |          |          |          |
|-----|-------------------|--------------|--------|----------|----------|----------|----------|----------|
|     |                   |              | MS     | CS       | CPS      | MCS      | AS       | SS       |
| 1.  | Alfian, 2021      | QL           | √       |          |          |          |          |          |
| 2.  | Aziz & Shah, 2020 | QN           |          | √        |          |          |          |          |
| 3.  | Dorand, 2020      | MM           | √       | √        |          |          |          |          |
| 4.  | Salam et al., 2020| QL           |          |          |          |          |          |          |
| 5.  | Hashim et al., 2018| MM         | √       |          |          |          |          |          |
| 6.  | Wael et al., 2018 | QL           | √       | √        |          |          |          |          |
| 7.  | Altay & Saracaloglu, 2017| MM | √       |          |          |          |          |          |
| 8.  | Dawadi, 2017      | QN           |          |          |          |          |          |          |
| 9.  | Zakaria et al., 2018| MM         |          |          |          |          |          |          |
| 10. | Koc, 2017         | MM           |          |          |          |          |          |          |
| 11. | Syafryadin, 2020  | QN           |          |          |          |          |          |          |
| 12. | Habok & Magyar, 2018| QN         |          |          |          |          |          |          |
| 13. | Alhaysony, 2017   | QN           |          |          |          |          |          |          |
| 14. | Rianto, 2020      | QN           |          |          |          |          |          |          |
| No. | Authors | Study Design | Learning Strategies | Direct | Indirect |
|-----|---------|--------------|---------------------|--------|----------|
|     |         |              |                     | MS     | CS       | CPS | MCS | AS | SS |
| 15  | Marpaung & Widyanotoro, 2020 | QN |           | √      | √        |     |     |     |     |     |
| 16  | Saputra & Subekti, 2017 | MM |           | √      | √        |     |     |     |     |     |
| 17  | Ong et al., 2018 | MM |           |         | √        |     |     |     |     |     |
| 18  | Lestari & Wahyudin, 2020 | QN |           | √      |         |     |     |     |     |     |
| 19  | Naaim & Hashim, 2019 | QN |           | √      |         |     |     |     |     |     |
| 20  | Wahyuni, 2019 | MM |           |         | √        |     |     |     |     |     |
| 21  | Taheri et al., 2020 |   |           | √      | √        |     |     |     |     |     |
| 22  | Adi et al., 2019 | QL |           |         | √        |     |     |     |     |     |
| 23  | Khumhom & Taylor, 2019 | QN |           | √      |         |     |     |     |     |     |
| 24  | Citra & Zainil, 2021 | QL |           | √      | √        |     |     |     |     |     |
| 25  | Masibiroroti & Fajaryani, 2020 | QL |           | √      |         |     |     |     |     |     |
| 26  | Fussalam, n.d. | QN |           |         | √        |     |     |     |     |     |
| 27  | Syamaun et al., 2019 | QL |           | √      |         |     |     |     |     |     |
| 28  | Lestari & Fatimah, 2020 | QN |           |         | √        |     |     |     |     |     |
| 29  | Kurnia, 2019 | MM |           | √      |         |     |     |     |     |     |
| 30  | Parnrod et al., 2017 | QN |           |         | √        |     |     |     |     |     |
| 31  | Mam, n.d. | QL |           | √      | √        | √   | √   |     |     |     |
| 32  | Grisales & Cruz, 2017 | QL |           | √      |         |     |     |     |     |     |
| 33  | Istiqomah et al., 2019 | QL |           |         | √        |     |     |     |     |     |
| 34  | Sitompul et al., 2019 | QN |           | √      |         |     |     |     |     |     |
| 35  | Basalamo et al., 2020 | MM |           |         | √        |     |     |     |     |     |
| 36  | Alihusni et al., 2018 | QL |           | √      |         |     |     |     |     |     |
| 37  | Syafryadin et al., 2020 | QN |           |         | √        |     |     |     |     |     |
| 38  | Widhayanti, 2018 | QL |           | √      |         |     |     |     |     |     |
| 39  | Pertiti & Suwartono, 2019 | QL |           | √      |         |     |     |     |     |     |
| 40  | Muslimin, 2019 | QL |           |         | √        |     |     |     |     |     |

CS= Cognitive Strategies, MCS= Meta-cognitive Strategies, SS= Social Strategies, MS= Memory Strategies, CPS= Compensation Strategies, AS= Affective Strategies, QN= Quantitative, QL= Qualitative, MM= Mixed method

Figure 1 shows the percentage of most used language learning strategies for speaking skills based on searches from 2017 until 2021. Based on the pie chart, meta-cognitive strategies were found to be the most frequently used strategies (31%), followed by cognitive strategies (22%), compensation strategies (17%), social strategies (14%) and affective and memory strategies both at 8% each. This indicated that most learners use meta-cognitive in learning speaking skills, while affective and memory strategies were less used as learning strategies for speaking skills.

Figure 2. The percentage of the most used language learning strategies
Findings

In this section, the most frequently used language learning strategies in learning speaking skills were discussed based on meta-cognitive strategies, cognitive strategies, compensation strategies, social strategies, memory strategies, and affective strategies.

**Meta-cognitive Strategies Used in Learning Speaking Skills**

Based on the findings, 28 out of 40 articles found from the search that mentioned meta-cognitive strategies were most frequently used by language learners for speaking skills (Adi et al., 2019; Alfian, 2021; Alhaysony, 2017; Aziz & Shah, 2020; Basalama et al., 2020; Citra & Zainil, 2021; Dawadi, 2017; Dorand, 2020; Grisales & Cruz, 2017; Habok & Magyar, 2018; Hashim et al., 2018; Istiqomah et al., 2019; Khunhom & Taylor, 2019; Kurnia, 2019; Lestari & Fatimah, 2020; Lestari & Wahyuni, 2020; Masbirorotni & Fajaryani, 2020; Muslimin, 2019; Ong et al., 2018; Parrod et al., 2017; Rianto, 2020; Sitompul et al., 2019; Syafryadin, 2020; Wael et al., 2018; Wahyuni, 2019; Zakaria et al., 2018). Results were consistent with studies from 2011 until 2014 as reported whereby meta-cognitive strategies were frequently used (Dawadi, 2017). This indicated that there has not been much difference in the most frequently used strategies in three years' gap. Learners who used meta-cognitive strategies were able to self-monitor their own learning process which means that they can be identified as successful learners (Dawadi, 2017; Wahyuni, 2019). Learners were able to plan, organize and set goals when learning (Lestari & Fatimah, 2020; Wael et al., 2018).

In using meta-cognitive strategies, learners are more independent. Learners also are aware of the learning strategies used when they are in the learning process. They could arrange and plan their learning strategies and self-evaluate their own performance (Adi et al., 2019; Wael et al., 2018). Independent learners produce good language learners. By acknowledging them, they could help low achievers to achieve better results.

**Cognitive Strategies Used in Learning Speaking Skills**

The second most used strategies found in the review was cognitive strategies (Alfian, 2021; Alhaysony, 2017; Aziz & Shah, 2020; Basalama et al., 2020; Citra & Zainil, 2021; Dawadi, 2017; Dorand, 2020; Grisales & Cruz, 2017; Hashim et al., 2018; Kurnia, 2019; Mam, n.d.; Marpaung & Widyantoro, 2020; Masbirorotni & Fajaryani, 2020; Parrod et al., 2017; Salam et al., 2020; Saputra & Subekti, 2017; Syamaun et al., 2019; Taheri et al., 2020; Wael et al., 2018; Widhayanti, 2018). From the search, 20 out of 40 articles mentioned cognitive strategies as the most frequent used strategies for speaking skills. Learners with cognitive strategies imitate other learners as a strategy in learning. Learners also indicated that this strategy is associated with the limitations in producing the language (Dawadi, 2017). This might affect introvert learners as they are not as active as the extrovert learners. Learners also acknowledge the importance of speaking skills to practice what they have learnt (Altay & Saracaloglu, 2017). Other than that, learners repeat sound to improve on their pronunciation when learning speaking skills (Wael et al., 2018). Cognitive strategies were used by learners in practicing, receiving, and sending message, followed by creating sentence structures by taking notes (Salam et al., 2020). In practicing, learners repeat, practice with sounds and practice naturally (Salam et al., 2020). Cognitive strategies also help learners to enrich their vocabulary (Marpaung & Widyantoro, 2020).

**Compensation Strategies Used in Learning Speaking Skills**

The use of compensation strategies was also highlighted in the findings (Alhaysony, 2017; Dawadi, 2017; Dorand, 2020; Fussalam & Kurniawan, n.d.; Grisales & Cruz, 2017; Lestari & Wahyuni, 2020; Marpaung & Widyantoro, 2020; Muslimin, 2019; Salam et al., 2020; Saputra & Subekti, 2017; Syamaun et al., 2019; Taheri et al., 2020; Wael et al., 2018; Wahyuni, 2019; Zakaria et al., 2018). 15 out of 40 articles mentioned compensation strategies were the most frequently used strategies in learning speaking skills. Another study also highlighted compensation strategies as the second most favored strategies as learners depended on this strategy especially when they need to produce the language (Dawadi, 2017). Compensation strategies help learners to improve their fluency in speaking skills (Marpaung & Widyantoro, 2020). Syafryadin et al. (2020) found that competent and poor learners both use compensation strategies differently in delivering intended messages.

Compensation strategies acts as an alternative strategy in guiding learners to overcome difficulties in mastering the language (Syafryadin et al., 2020). When learners lost for words, they use gestures, mime, or synonym to get the message across. The findings indicated that learners were aware of their language limitations when they used compensation strategies in speaking (Wahyuni, 2019).

**Social Strategies Used in Learning Speaking Skills**

12 out of 40 articles mentioned the use of social strategies as the most often used strategies for speaking skills (Altay & Saracaloglu, 2017; Basalama et al., 2020; Dorand, 2020; Grisales & Cruz, 2017; Hashim et al., 2018; Istiqomah et al., 2019; Koc, 2017; Lestari & Wahyuni, 2020; Mam, n.d.; Naaim & Hashim, 2019; Ong et al., 2018; Wael et al., 2018). The tendency to use social strategies as a strategy for speaking skills started to emerge with the use of technologies in language learning.
learning. However, social strategies were indicated as among the least preferred strategies to be used by language learners in some studies especially when learners were asked to communicate to others in correcting their speech (Dawadi, 2017). When using social strategies, learners seek for clarifications when practicing speaking skills from people who they trust (Wael et al., 2018).

Learners who use social strategies are more outspoken as they find ways to practice the English language (Lestari & Wahyudin, 2020). Activities such as role play could be a good way to practice language in the classroom.

Memory Strategies Used in Learning Speaking Skills

Among the least used strategies found from this review were memory strategies (Altay & Saracaloglu, 2017; Dorand, 2020; Mam, n.d.; Muslimin, 2019; Saputra & Subekti, 2017; Wael et al., 2018; Widhayanti, 2018). Memory strategies were among the least used strategies since it is associated with the level of proficiency among learners (Dawadi, 2017). However, Wael et al. (2018) found these strategies to be the most frequently used strategy among third semester learners in a higher learning institution. Learners were reported to use visual connection and imagery in enhancing their speaking performance (Wael et al., 2018). Learners who use these strategies store important things they heard and read them in new language base. Memory strategies were least helpful for speaking skills in general (Marpaung & Widyantoroto, 2020). In memory strategies, learners create a mental strategy, apply images and sound, review and employ action (Widhayanti, 2018). Learners combine sounds and images in their memory and generate visual images of the new word when using these strategies. Therefore, there were only a few findings that mentioned memory strategies as the most frequently used strategies for speaking skills.

Affective Strategies Used in Learning Speaking Skills

Affective strategies were also least mentioned as the most frequently used strategy in language learning (Aziz & Shah, 2020; Citra & Zainil, 2021; Dawadi, 2017; Grisales & Cruz, 2017; Koc, 2017; Pertivi & Suwartono, 2019; Taheri et al., 2020). Affective strategies were found to be the least favored since it is also related to the level of proficiency among learners (Dawadi, 2017). Affective strategies were less emphasized since less attention was given to emotional factors when learning English (Lestari & Wahyudin, 2020). In a supportive learning environment, learners learn better with help from successful learners. Adult learners, on the other hand, paid less attention to affective strategies (Dawadi, 2017). Other than that, it was found that in this new learning environment, learners used music in learning as one of the ways to decrease their anxiety (Wael et al., 2018; Widhayanti, 2018). Discussing feelings with other learners also help with anxiety (Widhayanti, 2018).

Discussion

The language learning strategies by Oxford (1990) and Chamot (1987) were used in most studies (Alfian, 2021; Aziz & Shah, 2020; Dorand, 2020; Oflaz, 2019; Salam et al., 2020; Wael et al., 2018). In language learning, classifications of “language learning strategies” is referred to as a “guideline in identifying the learning strategies used by learners” (Oxford, 1990). Learners who used more language learning strategies such as metacognitive, social and memory strategies are prone to be good language learners when they can identify the suitable strategies to be used in language learning. Therefore, it can be summarized that higher academic achievement is usually achieved by students with more strategies in language learning (Oflaz, 2019).

The characteristics of a good language learner must be analyzed to enable other learners to be successful too (Rubin, 1975). Students who used meta-cognitive strategies as their language learning strategy indicated that they are highly motivated and can self-regulate their own learning (Hromalik & Koszalka, 2018). This autonomous way of learning encourages students to play an active role and be independent while learning and enable learners to study at their own pace and time (Abdelouahed, 2019; Sandorova & Betak, 2021). As a result, the language learning strategies among students in the current learning environment is relevant to be measured as to give insights on how the current language learners learn languages in the present setting with the support from modern technologies.

The integration of technologies into the learning environment and the shift to online learning environment brought new findings on the learning strategies used in recent years (Healey, 2018). As learners are expected to be prepared for the workplace in this fast-changing world, there is a need to upgrade the skills and familiarity to the technologies (Ramamuruthy et al., 2021). The learning strategies identified from the review indicated that technologies and online learning have been integrated into language learning in recent years. The use of Facebook, for instance, has been a way for learners to learn language by using cognitive strategies (Dorand, 2020). This was not stated as a strategy in past studies as Facebook was not a common tool back then. In affective strategies, Dorand (2020) mentioned the use of Information and Communication Technology in reducing learners’ anxiety in language learning and further encouraged learners to practice the language. In using meta-cognitive strategies, the online learning environment enhanced learner's level of independence as they were able to self-regulate their own learning (Hromalik & Koszalka, 2018). With the new learning environment, the use of strategies in learning has changed compared to the strategies used in the past years.

Conclusion
This systematic literature review emphasized on learning strategies for speaking skills in a new learning environment. The authors identify the need to bridge the gap in identifying the language learning strategies in recent years. Based on the research question, meta-cognitive and cognitive strategies were among the most often used strategies in learning speaking skills. As compared to previous studies, memory strategies were most frequently used by learners. The findings also indicated that due to the new learning environment, learners are more independent in learning speaking skills. Learners who used meta-cognitive strategies are highly motivated and can self-regulate their own learning. They are more independent and more autonomous in language learning process. Learners could study at their own pace and become a successful language learner.

Emphasis was given more to language learning strategies in the early years as there were focused on “the good language learner”. It is important to sustain the quality of the product of “good language learners” to produce quality graduates. Besides that, learners with positive attitude are said to be more successful and uses more learning strategies. They are also motivated to learn and have set certain goals they want to achieve in language learning. Current studies are more focused on the methods used by students in coping with the recent changes in technologies. By classifying the strategies used by a language learner, educators would be able to identify the most suitable teaching approach to be used in online teaching. This would not only produce “good language learners”, but it would also assist the educators to look for relevant activities to be carried out during lessons.

**Recommendations**

For future research, researchers should focus on the factors that influences the learning of speaking skills in an online learning environment. Since online learning is the current learning environment most students face nowadays, researchers should look at the link between language learning strategies and online learning. It is also important to identify the factors that could influence the learning strategies used by learners to enable teachers to use suitable strategies when teaching in the current learning environment. With proper strategies used, learners will be well equipped with excellent speaking skills as they graduate and go into the job market.

**Limitations**

There were several challenges and limitations identified when conducting this study. This study only examined 40 articles which were taken from ERIC and Google Scholar. Due to limited time, the authors were not able to look for articles from other well-known databases. The research would also be better if authors look at other learning skills such as reading, listening, and writing to see the comparison of the most frequently used learning skills by language learners. As the author initially planned to look only at speaking skill, this review focuses on only one skill. Besides that, another limitation is the keywords that the authors used in searching for the articles.

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