Review Article

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Scaffolding strategy and speaking skills development in the English teaching process

Estrategia de andamiaje y desarrollo de la expresión oral en el proceso de enseñanza del inglés

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Abstract

Keywords:

Scaffolding strategy; speaking skills; English language acquisition

Introduction: The purpose of this review article is to provide readers with an overview of research made on the influence of the scaffolding strategy on the development of English-speaking skills, including information such as its effectiveness in the English classroom and an account of the facets of this strategy that should be further developed. Method: Exploring two well-known open access databases: ERIC and Scilit, the authors collected thirteen articles published between 2020 and 2024. The review focuses on analyzing the effectiveness of scaffolding strategy in improving speaking skills in English, making emphasis on the types of scaffolding employed and their characteristics. Results and Discussion: The analysis of the articles is based on four main types of scaffolding: conceptual, procedural, strategic, and metacognitive. Conceptual scaffolding introduces learners to key pieces of information, procedural scaffolding refers to the assistance given regarding the utilization of tools for learning, strategic scaffolding refers to the employment of alternative procedures to reach an objective and finally, metacognitive scaffolding fosters self-regulation, reflection, and is supported by feedback. The selected studies have been labelled according to this classification, thus obtaining articles that included from one to multiple scaffolding types. Conclusions: This article demonstrates that scaffolding is a highly effective strategy for developing English learners' speaking skills.

Resumen

Palabras clave:

Andamiaje; habilidades orales; adquisición del idioma inglés

Introducción: el propósito de este artículo de revisión es proveer a los lectores una visión general de las investigaciones sobre la influencia de la estrategia del andamiaje en el desarrollo de las habilidades orales en inglés, incluyendo información, como su efectividad en el aula de clases de inglés y un recuento de los aspectos de la estrategia que deberían ser desarrollados. **Metodología**: a través de la exploración de dos bases de datos: ERIC (Education Resources Information Center) y Scilit (Scientific & Scholarly Research Database), los autores recolectaron trece artículos publicados entre 2020 y 2024. La revisión se enfoca en analizar la efectividad de la aplicación del andamiaje para el mejoramiento de habilidades orales en inglés, con énfasis en los tipos de andamiaje empleados y sus características. Resultados y discusión: el análisis de los artículos se basa en cuatro tipos de andamiaje principales: conceptual, procesal, estratégico y metacognitivo. El andamiaje conceptual introduce a los alumnos a piezas clave de información; el andamiaje procesal se refiere a la asistencia dada en relación con la utilización de herramientas para el aprendizaje; el andamiaje estratégico se relaciona con el uso de procedimientos alternativos para alcanzar un

objetivo, y, finalmente, el andamiaje metacognitivo fomenta la autorregulación y reflexión, así como se apoya en la retroalimentación. Los estudios seleccionados han sido etiquetados de acuerdo con esta clasificación, y así obtener artículos que incluyen de uno a múltiples tipos de andamiajes. **Conclusión**: este artículo demuestra que el andamiaje es una estrategia altamente efectiva para desarrollar las habilidades orales de los estudiantes de inglés.

1. Introduction

In today's interconnected world, learning English as a foreign language has become an essential skill for individuals seeking to communicate orally with people around the globe, especially because a great part of the world's citizens understands and practice this language (Tika & Dewi, 2022). Therefore, speaking English facilitates the process of making oneself understood in countries where one's mother tongue is not spoken, which can be said to justify its inclusion as a subject in the curricula of several countries (Sah, 2022).

Nevertheless, many authors like Haung (2006, as cited in Zarandi & Rahbar, 2016), Yuniarti (2017), and Rajendran and Md Yunus (2021) concur that of the four language skills that English entails, speaking is considered one of the most challenging to master by learners of this language, which is a predicament that appears exacerbated when the importance of this ability is considered. According to Sabnani (2024), "Speaking well facilitates language learners' interaction in academic and social settings", meaning that the development of speaking skills has a crucial role not only as a means of communication but also as a tool for learning. This is seconded by Walqui (2006) as well as Katemba and Grace (2023), who affirmed that the ability to communicate and interact with their peers empowered students' learning process. These affirmations were taken a step further by Nasiri and Gilakjani (2016), who concluded in their article that being able to communicate effectively in a second language allows learners to succeed in their lives beyond the classroom. Given this, it can be concluded that the effort that English teachers put into helping students enhance their oral communication abilities becomes properly justified; taking into account that the way that educators undertake this task has a major influence on how satisfactorily students acquire said abilities (Sari & Rozimela, 2021).

However, it is important to clarify what is understood by "speaking" before delving into classroom practices. Brown (1994), Burns and Joyce (1997), and Chaney and Burk (1998) stated that speaking is a process that involves producing and receiving information, which makes it interactive. In other words, speaking is a two-way operation in which not only the information is delivered but also responses are obtained, shaping in this way an active exchange between the participants.

When considering the specifics, several researchers have offered their own conceptualization of the components of speaking skills. For instance, the book International Perspectives on Psychological Science: Leading Themes considers components such as preparation of speech, grammatical encoding, phonological encoding, and articulatory components (Bertelson et al., 1994). Likewise, in a research project carried out by Bahrani and Soltani (2011), different components such as fluency, accuracy, vocabulary, comprehension, accent, and communication were found to be what learners work on to improve their speaking skills. From this list, we can highlight the component of fluency, which is when speakers engage in a meaningful conversation that occurs naturally (Shahini & Shahamirian, 2017); a definition that emphasizes its role as the most noticeable component of speaking skills. Additionally, other authors explain that people typically use the word to denote the oral production of a person who can use the language effectively, usually in reference to someone who speaks a foreign language (Chambers, 1997).

Still, as it was previously stated, many language students find it difficult to develop their speaking skills. According to Baker and Westrup (2003, as cited in Megawati & Mandarani, 2016), one challenge faced by learners when speaking lies in their lack of knowledge about appropriate vocabulary and grammar structures, as well as general ideas about the assigned topic. Furthermore, the levels of difficulty of the used materials can also represent an obstacle for students, leading them to choose not to participate in the proposed speaking activities (Irmawati, 2016), most likely due to the fear of committing mistakes and being judged for them, which is very common in students (Hopärtean, 2015).

One of the procedures that teachers implement in order to help students develop their English-speaking skills is scaffolding. The name of this strategy, coined by David Wood, Gail Ross, and Jerome Bruner in 1976, is most likely to be a reference to constructions, suggesting the idea that the educational assistance given to a learner is similar to the scaffolding used by construction workers, as it helps to build the knowledge and skills of a person until it is no longer needed. As Wood et al. (1976) stated: "scaffolding consists essentially of the adult 'controlling' those elements of the task that are initially beyond learner's capacity, thus permitting him to concentrate upon and complete only those elements that are within his range of competence" (p. 90). In addition, many studies have provided their own conceptual interpretation of this strategy, defining it as the temporary assistance that teachers supply learners to help them grasp and complete a task successfully so that later they are able to complete a similar one as they become more autonomous (Gibbons, 2002; Meyer & Turner, 2007; Monteira et al., 2020; Yildiz & Celik, 2020).

Other authors have detailed the function of the teacher in this strategy. For instance, Birjandi and Jazebi (2014), Van de Pol et al. (2010), and Van de Pol et al. (2013) agree that the role of educators is significant, as they manage and provide appropriate support in a range of ways, such as modelling and questioning for assimilation of the activity, in an attempt to help students achieve a high level of performance. Also, they are in charge of conducting the process according to their students' needs, for which they should control key aspects such as the level of the tasks and their relevancy to the competencies that students must develop (Suherdi, 2008; as cited in Arlinda, 2020).

In the same way, there are some studies that reflect the effectiveness of scaffolding in speaking skills. For instance, Mirahmadi and Alavi (2016) and Evenddy et al. (2024), concluded in their investigations that scaffolding has a significant influence on the speaking skills of learners, leading to an improvement in specific components like pronunciation and grammar, as well as other complementary aspects of communication like confidence and critical thinking, respectively. Goh (2017) declared the use of scaffolding activities as effective in helping learners strengthen their oral communication abilities by planning, organizing speech, and better performing the language. Finally, Naibaho (2019) demonstrated in his investigation that the application of scaffolding generates positive responses toward activities and boosts student motivation, impacting the development of speaking skills in a positive way.

Similarly, it has been demonstrated that the use of scaffolding in the classroom can encourage learners to speak with more confidence in their abilities. One example of this is the study carried out by Azir (2019), which was focused on peer scaffolding and whose results showed that the application of scaffolding impacted positively the student's speaking performance



by providing them with opportunities to help each other and practice the skill in a more supportive environment.

Based on these findings, it can be claimed that this strategy aids students to be confident in their abilities by working on activities that allow them to develop their problem-solving skills so that they can progressively reach their assigned learning goals. Thus, scaffolding can be considered as a useful tool to bridge the gap between the tasks that can be accomplished independently by the learner and the tasks that they are able to complete successfully but with some guidance. This was emphasized by Meyer and Turner (2007, as cited in Shahidzade et al., 2022) in their investigation, which underscored the impact that this strategy has in helping students move from shared to independent responsibilities.

As per the previous analysis of the featured investigations, it can be stated that scaffolding is a prodigious strategy that has been a helpful tool for learners to improve their speaking skills in the classroom, raising their self-confidence when it comes to participating in an oral manner. This highlights the significant role that scaffolding plays during a speaking performance by giving clear instructions and supporting learners to achieve their ultimate learning goals as well as develop their speaking skills without the usual nervousness

that some students can experience when it comes to learning a foreign language.

Many studies have been conducted regarding the influence of this strategy on the development of English-speaking skills, as proven in previous descriptions. Nonetheless, these studies differ in the context in which they were performed, causing a myriad of different results regarding the effectiveness of the scaffolding strategy on speaking skills. As a result, the primary goal of this article is to synthesize the findings of research articles made on this topic in order to make the information more accessible to members of the educational community. Additionally, this study seeks to answer secondary questions such as how effective the implementation of scaffolding is in developing speaking skills in the classroom, and which aspects of the implementation of this strategy should be further developed.

Regarding its structure, the present review article is divided into sections to facilitate a comprehensive and methodical examination of the chosen topic. The introduction provides background information on English speaking skills and the importance of their development, along with a detailed conceptualization of the scaffolding strategy and a description of the existing research on its influence on the specified skills. The methodology of the investigation, which can be found next, includes an overview of the steps and the criteria used to select the articles to be analyzed. Then, the results and discussion section of the paper showcases a thorough examination of the selected studies, including descriptions of their methodologies, the category of scaffolding they feature, and their findings. Additionally, the authors provide the answers to their established research questions, which mainly seek to determine the effectiveness of the scaffolding strategy as well as the aspects that should be considered in future investigations on this topic. Lastly, the conclusion of the study provides a summary of the findings of the review along with their implications for practitioners, teachers, and policymakers, fulfilling in this way the main objective of this study.

2. Methodology

This investigation is dedicated to the examination of literature that researches the influence of the scaffolding strategy in the development of English speaking skills; a group of abilities that, as described in previous sections of this study, need an extensive amount of practice and an effective strategy that engages learners to improve them. This study follows an adapted approach based on the PRISMA 2020 guidelines (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) to structure the process of identification, screening, eligibility, and inclusion of studies (Page et al., 2021). Those modifications were made to align with the scope and limitations of this review.

The articles that are examined in this study were selected from the open-access databases ERIC and Scilit. In order to carry out a more organized and rigorous search in the selected databases, Boolean operators were employed in this process. In the ERIC database, the sentence "Scaffolding" AND "Speaking" was entered in the search bar, which displayed a total of 224 files. In the same way, the Scilit database was searched using the same keywords, which were entered in separate text boxes in the "keyword" category and

were joined by an AND operator. This search amounted to 685 files. As a result, the search of articles in both databases generated a total of 909 documents.

Once this process was completed, the second step was to separate the articles that were useful for the purpose of the present investigation. For this, the researchers developed a set of criteria for inclusion and exclusion of the gathered documents, in which the inclusion criteria stated that the selected documents must: be a journal article, have been published between 2020 and 2024, and study the influence of the selected independent variable in the selected dependent variable (Table 1). The reason for the establishment of these criteria lies in the necessity to obtain research articles that are aligned with the objective of the present investigation and constitute a direct study of the variables using primary sources rather than secondary ones.

On the other hand, the exclusion criteria state that the article is disregarded from the investigation if: it is not a journal article, it was not published between the years 2020 and 2024, it does not belong to an experimental/quasi-experimental type of research, or if it is not written in English (Table 1). The establishment of these specific criteria ensures the obtainment of research articles that depict a current outlook of the research variables and that implement scaffolding strategies through direct experimentation.

The total results obtained in the search were screened according to the previously

Table 1. Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
It is a journal article	It is not a journal article
It was published between 2020 and 2024	It was not published between 2020 and 2024
It studies the influence of the selected independent variable on the selected dependent variable	It does not belong to an experimental/quasi- experimental type of research
	It is not written in English

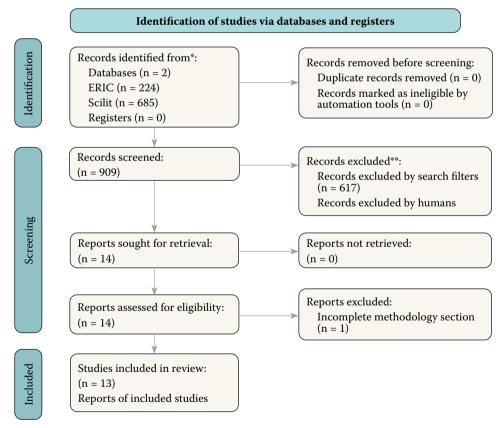
Source: Own elaboration

described criteria, using the filtering tools of each database to reduce the list of results. In ERIC, the search settings were configurated to only include journal articles that had been published between 2020 and 2024, which came to a total of 56 articles. From those 56 articles, the researchers filtered those that did not study the cause-and-effect relationship between the proposed variables, as well as those that did not belong to an experimental or quasi-experimental type of research nor were written in English, amounting to a total of two articles.

In Scilit, the filtered search provided the investigators with 236 research documents

that were journal articles and had been published in the described period of time. Subsequently, the remaining articles were curated following the same sequence of steps as with ERIC, which resulted in a total of 12 articles. However, one article had to be eliminated due to the lack of information in its methodology section, which meant that it could not be analyzed comprehensively. Therefore, the total number of journal articles collected from Scilit was 11, yielding a total of 13 studies for the present literature review. The following PRISMA 2020 flow chart presents all the information in a detailed and structured format. (Figure 1).

Figure 1.PRISMA 2020 Flowchart: Identification of the studies via databases and registers



Source: Own elaboration

^{*}Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

^{**}If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

3. Results and discussion

The gathering process led to the obtention of 13 articles for the study, all of which discuss the influence of scaffolding strategy on the development of English speaking skills. The scope of the present literature review can be qualified as wide, as the selection of its articles includes research projects carried out in Iran (4), Ecuador (2), Vietnam (2), China (1), Indonesia (1), Iraq (1), Malaysia (1), and Ukraine (1). This information highlights the geographic diversity and relevance of the studies (Table 2).

Table 2.List of articles

Author	Title	Country	Institutions of publication	Type of article
Abedi (2022)	The impact of technology-mediated scaffolding on the development of EFL learners' speaking components	Iran	El Guiniguada	Research Article
Almeida et al. (2024)	Scaffolding techniques and speaking skill	Ecuador	Arandu UTIC	Research Article
Bao and Hung (2022)	The impact of scaffolding strategies on speaking performance: EFL teachers' perceptions and practices	Vietnam	International Journal of Science and Management Studies (IJSMS)	Research Article
Dwigustini et al. (2022)	How to scaffold young learners' English speaking class?	Indonesia	Linguistic, English Education and Art (LEEA) Journal	Research Article
Hameed and Ateha (2020)	The effectiveness of using visual scaffolding strategy in teaching English speaking skills to intermediate school students	Iraq	Tikrit University for Humanities	Research Article
Homayouni (2022)	Peer assessment in group-oriented classroom contexts: on the effectiveness of peer assessment coupled with scaffolding and group work on speaking skills and vocabulary learning	Iran	Springer	Research Article
Li and Zhang (2023)	The development of accuracy and fluency in second language (l2) speaking related to self-efficacy through online scaffolding: a latent growth curve modeling analysis	China	Springer	Research Article
Nhi and Alsaqqaf (2023)	Impact of a DMGA scaffolding-based module on improving the EFL speaking skills among Vietnamese ESP learners	Vietnam	Arab World English Journal	Research Article
Pishadast (2022)	Developing the speaking ability of EFL learners through scaffolding	Iran	Journal of Contemporary Language Research	Research Article
Riera and Paredes (2023)	Scaffolding strategy for encouraging speaking skills among tenth graders	Ecuador	Ciencia Digital	Research Article
Saienko and Nazarenko (2021)	Using speaking frames as scaffolding tools to teach university students to speak in ESP	Ukraine	International Journal of Learning, Teaching and Educational Research	Research Article
Sarmiento et al. (2022)	A look at Vygotsky's sociocultural theory (SCT): the effectiveness of scaffolding method on EFL learners' speaking achievement	Iran	Education Research International	Research Article
Sim et al. (2023)	Impact of online instructor scaffolding strategies on students' speaking performance	Malaysia	Malaysian Journal of Sustainable Environment	Research Article

Source: Own elaboration

This categorization of the results shows that most of the investigations come from Asian countries (76,92%), followed by Latin American countries (15,38%), and European countries (7,69%).

A meticulous analysis of the selected studies revealed the existence of a wide variety of scaffolding types, which are found in the activities that the participants of the investigations engaged in. For years, authors have tried to classify and conceptualize the different ways to scaffold instruction. The classification provided by Melero et al. (2012) established the existence of two types of scaffolding in the education field that depend on the level of the learning process: macro-scaffolding, which specifies activity workflow that students must adhere to in order to meet the established learning objectives; and micro-scaffolding, whose goal is the completion of activities through the accomplishment of specific tasks.

Another classification of scaffolding types is the one provided by Hannafin et al. (1999), which includes four categories. The first one is metacognitive scaffolding, which grants opportunities for the monitoring and assessment of one's assimilation process. Next, conceptual scaffolding involves the identification of key data that allows for the analysis and understanding of a topic and avoids the provision of direct answers. Thirdly, strategic scaffolding is about the exploration of more effective alternatives to the resolution of a problem. Lastly, procedural scaffolding refers to the continuous guidance that helps learners use different learning tools. This classification is the one that is going to be used to examine the articles in the present section, as the described types closely parallel most of the tools and strategies described in the methodology segments of the chosen studies.

During the analysis of the 13 articles, the researchers determined the existence of a

blended methodology in most of the studies, caused by the inclusion and interaction of different types of scaffolding. Nevertheless, some of the investigations were also characterized by the presence of a predominant scaffolding type, which the authors of this article decided to utilize as a starting point in order to build up to the examination of the interaction of the different types.

For starters, the investigation carried out by Hameed and Ateha (2020) featured scaffolding resources of the visual type, such as maps, pictures, and drawings, which aided students in the accomplishment of a speaking task. The inclusion of these resources makes the investigation fall into the category of conceptual scaffolding, as they served the purpose of introducing the key vocabulary for the session and helping students assimilate it. Ultimately, their use was concluded to help foster students' creativity for organizational and generative purposes and facilitate the assimilation of new content, which are abilities that indirectly contribute to the development of speaking skills.

Metacognitive scaffolding, whose aim is to support students' metacognition of the learning process through teacher guidance and feedback (Reingold et al., 2008; as cited in Zhou and Lam, 2019), was also a predominant type in some studies. The investigation conducted by Homayouni (2022) applied scaffolding of this type by having the experimental group receive and participate in peer assessment, allowing all the participants to be provided feedback by their peers on criteria determined by the researcher. This study is aligned with the metacognitive type of scaffolding because it provided students with opportunities to assess their learning in order to improve it in future sessions. In the end, this testing was proven to be effective, as it positively impacted the vocabulary recall and retention of the students in the experimental group.

The influence of peer interaction was also recognized by other authors such as Riera and Paredes (2023), who in their investigation allowed students to share their understanding and practice with each other, providing in this way opportunities for the assessment of their needs in terms of the requests of the assigned task. In the same way, the study conducted by Li and Zhang (2023) mentioned the effect of peer interaction on the development of fluency as a way to explain why this aspect had not been impacted in a significant way during their investigation, which involved the production of monologues with the assistance of scaffolding. Nevertheless, this study also involved the provision of tailored feedback by the teacher and peers, which helped students improve their speaking accuracy.

It is important to state that the aforementioned articles use a blended methodology, combining both metacognitive and conceptual scaffolding in their experimentation. First, Riera and Paredes (2023) make use of modeling, keywords and clues in order to introduce the main themes of the speaking session and help students remember them better This support was also present during the task, as the teacher guided students by providing them with explicit hints such as the phonetic symbols for the words they had trouble pronouncing, which combined

The provision of feedback in this study during and after the speaking sessions helped label it as metacognitive as well since it aimed to help students gain a deeper understanding of the task and know how to improve its execution. with the previously mentioned procedures contributed to the improvement of speaking components such as grammar, vocabulary, pronunciation and interactive communication. Similarly, Li and Zhang (2023) provided the participants with interrogative prompts in the form of "wh-questions" as a way to help them expand their monologues, exemplifying in this way the use of specific clues.

Other articles of our selection also combined these two scaffolding types, specifically those written by Nhi and AlSaggaf (2023), Sarmiento et al. (2022), and Almeida Obando et al. (2024). For instance, the study carried out by Nhi and Alsaqaff (2023) presented learners with clues as needed during the task, but it also made use of diagnostic questions and modeling in the earlier stages in order to assess the participants' prior knowledge and familiarize them with the key information for the session, respectively. The provision of feedback in this study during and after the speaking sessions helped label it as metacognitive as well since it aimed to help students gain a deeper understanding of the task and know how to improve its execution. Overall, many participants of this study expressed that it positively impacted their vocabulary, pronunciation, and confidence. In the study of Sarmiento et al. (2022), the participants were given pictures and question cards in order to create conversations based on them, for which purpose they were also granted a series of examples. Moreover, the teacher in charge offered them guidance and feedback during the activity to ensure that they were correctly completing it. In the conclusion, the authors established that the implementation of scaffolding impacted student accomplishment in the speaking aspect in a positive way. In the same way, Almeida et al. (2024) presented similar scenarios that included supplying resources for conceptual understanding such as videos and mind maps, as well as providing feedback, which resulted in an improvement in students' vocabulary, grammar, pronunciation, and communicative skills.

Based on the descriptions of the previous articles, it can be said that there is a predominance of conceptual scaffolding in the ambit of speaking improvement. This statement is further proven in the investigation conducted by Bao and Hung (2022), as the teachers who were interviewed as part of this study expressed that the resources they used the most for scaffolding purposes were videos, mind maps, and pictures, as they helped them introduce the vocabulary to be produced during speaking sessions. Likewise, most of the interviewed teachers recognized in an appreciative manner the positive effect that the implementation of scaffolding had in supporting learners' vocabulary use, pronunciation, fluency, and confidence. However, a common concern raised regarding this type of scaffolding conveyed that these activities increased the dependence of the learners by providing them with specific language to produce, stunting their creativity.

Similar to conceptual scaffolding, metacognitive scaffolding can also be regarded as commonplace due to its extensive presence in the described articles. For example, the research conducted by Sim et al. (2023) emphasized the continuous provision of advice, suggestions, and corrections with the aim of advancing student's speaking competence, which ultimately helped students develop their critical and organizational skills as well as recognize their weaknesses and target them for improvement. Comparably, the study conducted by Abedi (2022) was characterized by assessing students' understanding in a continuous way to offer them feedback that pertained to their needs.

Interestingly, both mentioned studies featured technology in their investigations as a means of communication, with Sim et al. (2023) using applications like Zoom, Google Meet, and WhatsApp, and Abedi

(2022) using Telegram, thus earning the label of technology-inclusive studies. Also, both studies included a phase in which they instructed the participant students on the correct use of selected tools, providing "tutorials" that helped students know how certain processes should be done. In the case of Abedi (2022), the explanation was centered on how to use Telegram for the purposes of the study, while the training of Sim et al. (2023) focused on showing how roleplaying worked by using a video. This is an important distinction to make because, at a surface-level analysis, these explanations can be seen as proof of the presence of procedural scaffolding. However, due to them being featured only in the beginning phase of the treatment rather than as a form of ongoing support, they are just initial clarifications. Overall, Abedi (2022) concluded that scaffolding led students to have a significant improvement in their fluency, coherence, and lexical resource; whereas Sim et al. (2023) reported an enhancement in students' communicative ability and content of their utterances.

The remaining articles had the presence of strategic scaffolding, which supports problem resolution managed through various means. One example is the investigation done by Pishadast (2022), which used group brainstorming as a way to give students more options to obtain information about the topic at hand, fostering the creation of an interactive environment. Furthermore, this study also depicted ongoing teacher guidance during the task; however, it is difficult to state whether this assistance belonged to the conceptual or metacognitive type, as the way in which the instructor helped students is not specified. In the end, Pishadast (2022) concluded that not only students' speaking skills were enhanced, but also their levels of motivation and engagement in the class.

In contrast, the depiction of strategic scaffolding presented by Saienko and Nazarenko

(2021) had a more complex structure. In this investigation, the researchers provided the participants with the task of writing and performing a dialogue, breaking it down into simpler steps that involved the creation of speaking frames based on their own perception of the given examples. For this, they had to generalize ideas and draw schemes of the monologues, which ultimately led to the improvement of their grammatical and lexical accuracy, plus an enhancement in the structuring of their discourse. Additionally, students were allowed to share between them the different frames that they produced, which is representative of collaborative learning. Nevertheless, the use of speaking frames also concerned the implication of conceptual scaffolding, as in the earlier stages of the treatment these resources were used to help students become acquainted with the target grammatical structures and terminology of the topic at hand, without requiring them to construct their own. Lastly, the fact that students had to assess their learning needs in order to determine what tools they required for their speaking performance to succeed, makes this article fall into our classification as an example of metacognitive scaffolding as well.

As in the case of the previously examined study, the article written by Dwigustini et al. (2022) was set out to be analyzed on its own, as it presented a fascinating research scenario that included all four scaffolding types. First, the use of conceptual scaffolding was reflected in the employment of example dialogues and their respective pronunciation and rhythm modeling, as well as explanations of the included language expressions. Then, the use of strategic scaffolding could be found in the opportunity for students to ask and answer questions to each other during the speaking lesson, which represents an alternative way to seek information. Next, the teacher's repetition of the explanation to students who needed it during the task can

be considered as an example of procedural scaffolding, whereas the given feedback and the opportunities provided to reflect on their understanding and performance after the session constitute an example of metacognitive scaffolding. Ultimately, this scaffolding combination was established to be effective according to the perceptions of the learners, who underscored the enhancement of speaking components like vocabulary and fluency, and factors like self-confidence.

An important finding of this review is that the combination of scaffolding types constitutes a very common occurrence, which ensures that the different difficulties that students may have during a lesson are covered. There are significant results when the methodology combines two types of scaffolding. For instance, Almeida et al. (2024) and Hameed and Ateha (2020) made use of visual resources that helped students with their recall and assimilation of the target language for the lesson, with constant assistance in the content of their speaking. Likewise, the researchers provided the learners with feedback that most likely improved their performance; that is, the way in which they delivered the content. Overall, both studies concluded that the implementation of scaffolding had a positive impact on students' oral expression.

Nevertheless, there is a type of scaffolding that requires proceeding with caution, as it denotes some challenges when it is applied. The use of conceptual scaffolding has been demonstrated to inhibit the creativity of learners due to the language to produce being given before every speaking session. This means that learners have limited agency in their independence and critical thinking to create the language and just wait for the tools to start to produce. However, the resources used in conceptual scaffolding often overlap with visual resources, which, as stated by Hameed and Ateha (2020), inspire students' creativity in managing ideas. For that reason, the use of this type of scaffolding should be guided carefully by educators in order to maintain a balance that allows students to develop their soft skills and encourages them to work autonomously and independently.

One last reflection stemming from the analysis of the articles can be made about the application of the monitoring tests. Going into detail, eleven of the thirteen selected studies administered pre and post-tests, from which seven utilized official standards. From these, six researchers directly used qualification exams such as the PET, TOEFL, OXFORD, and ESPT exams, while one used the criteria described in the Pearson Test of English. Most likely, the reason for this inclusion could be pointed out as the need to

maintain the unbiasedness of the research by ensuring that the tests' results were entirely objective, reducing in this way the possibility of making a comparison based on erroneous data.

Given all this information, scaffolding can be said to be a strategy that when correctly applied, positively impacts both learners' speaking performance as well as themselves, improving their self-confidence to communicate ideas in English effectively. These claims have their roots in the results obtained in this investigation (Table 3) which have yielded enough evidence to establish a positive relationship of influence between our independent and dependent variables.

Table 3. List of articles and their main findings

Author of the article	Type of scaffolding	Improvement of speaking skills	Main findings
Abedi (2022)	Metacognitive	Yes	Students' fluency, coherence, and lexical resources showed improvement
Almeida et al. (2024)	Conceptual Metacognitive	Yes	Students' grammar, vocabulary, pronunciation, and communicative skills were enhanced
Bao and Hung (2022)	Conceptual	Yes	Students' vocabulary, pronunciation, fluency, and confidence were reported to be improved
Dwigustini et al. (2022)	Metacognitive Conceptual Strategic Procedural	Yes	Students' vocabulary, fluency, and confidence were enhanced
Hameed and Ateha (2020)	Conceptual	Yes	Students' speaking skills and creativity for the generation and organization of ideas were boosted
Homayouni (2022)	Metacognitive	Yes	Students' speaking skills as well as their vocabulary retention and recall were improved
Li and Zhang (2023)	Conceptual Metacognitive	Partially	Students' speaking accuracy showed improvement, but their fluency did not
Nhi and Alsaqqaf (2023)	Conceptual Metacognitive	Yes	Students' vocabulary, pronunciation, and confidence had a positive development
Pishadast (2022)	Strategic Conceptual Metacognitive	Yes	Students' speaking skills were enhanced along with their levels of motivation and class engagement

Author of the article	Type of scaffolding	Improvement of speaking skills	Main findings
Riera and Paredes (2023)	Metacognitive Conceptual	Yes	Students' grammar, vocabulary, pronunciation, and interactive communication were strengthened
Saienko and Nazarenko (2021)	Strategic Conceptual Metacognitive	Yes	Students' discourse structuring as well as their grammatical and lexical accuracy were enhanced
Sarmiento et al. (2022)	Conceptual Metacognitive	Yes	Students' accomplishment in the speaking aspect was impacted positively
Sim et al. (2023)	Metacognitive	Yes	Students' critical and organizational skills were enhanced, along with their utterance content and communicative ability

Source: Own elaboration

A. How effective the implementation of scaffolding is in developing speaking skills in the classroom?

The evidence presented in this article demonstrates that the use of the scaffolding strategy during the English learning process has a major influence on the development of students' speaking skills. After analyzing the studies, the authors found that the use of scaffolding impacted important speaking elements such as pronunciation (Bao & Hung, 2022; Riera & Paredes, 2023), fluency (Abedi, 2022; Dwigustini et al., 2022), speaking accuracy (Li and Zhang, 2023; Sarmiento et al., 2022), grammar (Almeida et al., 2024; Saienko & Nazarenko, 2021) and vocabulary (Homayouni, 2022). Also, the implementation of scaffolding had an impact on factors such as confidence (Nhi & Alsaqqaf, 2023), creativity (Hameed & Ateha, 2020), communicative abilities (Sim et al., 2023), and motivation (Pishadast, 2023) as it fosters a classroom environment where students feel supported to improve their speaking abilities. As a result, these findings allow the researchers to provide a positive answer to the first research question of the article, as the implementation of scaffolding was proven to be

highly effective in the development of speaking skills in the classroom.

Nonetheless, it is important to point out that this effectiveness heavily depends on the time of use of the strategy in the oral dexterity lessons, so it will have a direct dependency dependence relationship with the proficiency level in the skill.

B. Which aspects of the implementation of this strategy should be further developed?

After rigorously analyzing the selected literature, the application of the scaffolding strategy can be considered to have a notable impact on the improvement of speaking skills. However, there are some aspects that have stood out during the review as interesting or useful for further development. Among these, the authors can name the application of scaffolding beyond formal education settings and the effect of technological scaffolding tools as the most relevant matters regarding the expansion and development of scaffolding as an essential tool for learning. Likewise, the implementation of AI for student assistance and monitoring constitutes an important aspect to be investigated in this area. Also, research on ways to lower students' dependence when working with conceptual scaffolding should be made in order to maximize student achievement related to productive tasks in language learning.

In conclusion, the results obtained from investigating these matters will most likely be of use to teachers, practitioners, and administrators, as they are focused on tackling the challenges of scaffolding and creating more opportunities for its use based on the advancements of the current world at the same time.

4. Conclusions

The evidence presented in this article demonstrates that the use of the scaffolding strategy has a positive influence on the development of students' English speaking skills. After analyzing the articles, the authors found that the use of scaffolding significantly impacted important speaking elements such as pronunciation, vocabulary, and fluency. Also, the implementation of scaffolding was proven to boost students' motivation and confidence, helping them enhance their skills and gain independence by actively participating in the learning process. Overall, these findings allow the authors of this review to provide a positive answer to the first research question of the article, as the application of scaffolding was demonstrated to be highly effective in the development of speaking skills in the classroom.

It is important to mention that some scaffolding elements were more used than others. Particularly, feedback, assistance, and resources depicting key information were evidenced to be the most utilized, as well as the most recognized as useful for their assigned purpose. However, that does not mean that other elements such as peer work and ongoing tutoring did not help achieve the desired outcomes in the speaking sessions, but they were not as present in the chosen articles. Given this, it is critical that current

and future English teachers know and use the different scaffolding types and their associated elements in order to construct learning experiences that help students succeed.

Furthermore, there are some important aspects that can be said to need further development based on the authors' examination. Matters like the use of the scaffolding strategy outside formal learning environments, the integration of technological tools in scaffolding sessions, and the use of AI as an assistant and tracker of students' progress are some important topics for future research. Additionally, investigating how to reduce the negative effects of conceptual scaffolding on learners' agency would help overcome said issue in the classrooms.

Lastly, the results of this review have several implications for practitioners, teachers, and policymakers. For teachers, these findings show the level of effectiveness of scaffolding as well as the different types, contexts, and ways to implement it, which are pieces of information that they can use to determine the best way to apply this strategy in their classrooms. For practitioners, the results obtained highlight the impact of the implementation of scaffolding in student learning, as the results obtained largely demonstrate the positive influence that it has on language components as well as student's emotions. Finally, for policymakers, these findings provide a strong argument to make scaffolding an essential constituent of educational frameworks, developing specific and measurable procedures that ensure its correct implementation.

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Conflict of interests

The authors declare that they do not have conflict of interest.

Authors' contribution

Research design (Alejandra Andreina Pinela Bajaña, Martina Nicole Rivadeneira Zurita); methodology (Alejandra Andreina Pinela Bajaña, Martina Nicole Rivadeneira Zurita); data analysis (Alejandra Andreina Pinela Bajaña, John Josue Alomoto Perero); manuscript review (Alejandra Andreina Pinela Bajaña, Martina Nicole Rivadeneira Zurita, John Josue Alomoto Perero, Mery Cecilia Chamba Reyes). All the authors have read and approved the submitted version.

Declaration of generative AI-assisted technologies in the writing process

During the preparation of this work, the authors used ChatGPT in order to obtain a reference for writing the abstract of the article. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

References

- Abedi, N. (2022). The impact of technology-mediated scaffolding on the development of EFL learners' speaking components. *El Guiniguada*, *31*, 54-68. https://doi.org/10.20420/elguiniguada.2022.505
- Almeida Obando, M. E., Bastidas Guevara, N. C., Mantilla Carrera, P. N., Solís Mejía, J. G., & Bejarano Urquizo, L. E. (2024). Scaffolding techniques and speaking skill. *Arandu UTIC*, 11(2), 206-225. https://doi.org/10.69639/arandu.v11i2.258
- Arlinda, H. (2020). Teachers' strategies in providing scaffolding in english for young learners classroom. En *Twelfth Conference on Applied Linguistics (CONAPLIN 2019)* (pp. 84-88). Atlantis Press. https://doi.org/10.2991/assehr.k.200406.017

- Azir, I. D. A. (2019). Applying peer scaffolding to enhance the EFL vocational students' speaking skills. *Ethical Lingua: Journal of Language Teaching and Literature*, 6(2), 149-157. https://doi.org/10.30605/25409190.v6.149-157
- Bahrani, T., & Soltani, R. (2011). Improving the components of speaking proficiency. *Canadian Social Science*, 7(3), 78-82. https://doi.org/10.3968/j.css.1923669720110703.012
- Bao, T. L. Q., & Hung, L. N. Q. (2022). The impact of scaffolding strategies on speaking performance: efl teachers' perceptions and practices. *International Journal of Science and Management Studies (IJSMS)*, 5(4), 157-166. https://doi.org/10.51386/25815946/ijsms-v5i4p118
- Baker, J., & Westrup, H. (2003). Essential speaking skills: A handbook for english language teachers. Continuum International Publishing.
- Bertelson, P., Eelen, P., & d'Ydewalle, G. (1994). *International perspectives on psychological science* (vol. 1). Psychology Press.
- Birjandi, P., & Jazebi, S. (2014). A comparative analysis of teachers' scaffolding practices. *International Journal of Language and Linguistics*, 2(3), 154-164. https://doi.org/10.11648/j.ijll.20140203.14
- Brown, H. D. (1994). *Teaching by principles: An interactive approach to language pedagogy etext.* Prentice Hall Regents.
- Burns, A., & Joyce, H. (1997). *Focus on speaking*. National Centre for English Language Teaching and Research.
- Chambers, F. (1997). What do we mean by fluency? *System*, 25(4), 535-544. https://doi.org/10.1016/s0346-251x(97)00046-8
- Chaney, A. L., & Burk, T. L. (1998). *Teaching* oral communication in grades K-8. Allyn And Bacon.
- Dwigustini, R., Ramadhan, A., Susilawati, S., Halim, N., & Morrison, C. B. (2022). How to scaffold young learners' english speaking

- class? *Linguistic, English Education and Art* (*LEEA*) *Journal*, 5(2), 194-206. https://doi.org/10.31539/leea.v5i2.3742
- Evenddy, S. S., Gailea, N., & Syafrizal, S. (2024). Exploring scaffolding approach to teach english in higher education. *Jurnal Visi Ilmu Pendidikan*, 16(1), 215-226. https://doi.org/10.26418/jvip.v16i1.73541
- Gibbons, P. (2002). Scaffolding language, scaffolding learning: Teaching english language learners in the mainstream classroom (2.4 ed.). Heinemann.
- Goh, C. C. M. (2017). Research into practice: Scaffolding learning processes to improve speaking performance. *Language Teaching*, 50(2), 247-260. https://doi.org/10.1017/S0261444816000483
- Hameed, D. T., & Ateha, H. M. (2020). The effectiveness of using visual scaffolding strategy in teaching english speaking skill to intermediate school students. *Journal of Tikrit University for Humanities*, 27(10), 14-33. https://doi.org/10.25130/jtuh.27.10.2020.24
- Hannafin, M., Land, S., & Oliver, K. (1999). Open learning environments: Foundations, methods, and models. En Charles M. Reigeluth (ed.), *Instructional-design theories and models: A new paradigm of instructional theory* (vol. 2, pp. 115-140). Routledge. https://doi.org/10.4324/9781410603784
- Huang, A. C. (2006). An investigation of communication strategy use in intercultural videoconferencing: A case study of Tamkang University English majors [tesis de maestría, Tamkang University].
- Homayouni, M. (2022). Peer assessment in group-oriented classroom contexts: On the effectiveness of peer assessment coupled with scaffolding and group work on speaking skills and vocabulary learning. *Language Testing in Asia*, 12(1). https://doi.org/10.1186/s40468-022-00211-3
- Hopartean, A. M. (2015). Speak without fear: Using debate as a teaching strategy to minimise adult students' anxiety in the language

- classroom. *Journal of Linguistic and Intercultural Education*, 9(3), 59-70. https://doi. org/10.29302/jolie.2016.9.3.4
- Irmawati, D. K. (2016). What makes high-achiever students hard to improve their speaking skill? *Journal of English Educators Society*, *1*(2), 71-82. https://doi.org/10.21070/jees.v1i2.442
- Katemba, C. V., & Grace, R. M. (2023). Role-playing improves speaking proficiency skills. Acuity: Journal of English Language Pedagogy, Literature and Culture, 8(2), 244-268. https://doi.org/10.35974/acuity.v8i2.3153
- Li, C., & Zhang, L. J. (2023). The development of accuracy and fluency in second language (L2) speaking related to self-efficacy through online scaffolding: A Latent growth curve modeling analysis. *Journal of Psycholinguistic Research*, *52*(5), 1371-1395. https://doi.org/10.1007/s10936-023-09950-7
- Megawati, F., & Mandarani, V. (2016). Speaking problems in english communication. En *The First ELTIC* (pp. 32-37). Universitas Muhammadiyah Purworejo. http://eprints.umsida.ac.id/5355/
- Melero, J., Hernández, D., & Blat, J. (2012). A review of constructivist learning methods with supporting tooling in ICT higher education: Defining different types of scaffolding. *Journal of Universal Computer Science*, *18*(16), 2334-2360. https://doi.org/10.3217/jucs-018-16-2334
- Meyer, D. K., & Turner, J. C. (2007). Scaffolding emotions in classrooms. En Paul A. Schutz y Reinhard Pekrun (eds.), *Emotion in education* (vol. 1, pp. 243-258). Academic Press. https://doi.org/10.1016/B978-012372545-5/50015-0
- Mirahmadi, H. S., & Alavi, S. M. (2016). The role of traditional and virtual scaffolding in developing speaking ability of iranian EFL learners. *International Journal of English Linguistics*, *6*(2), 43-56. https://doi.org/10.5539/ijel.v6n2p43
- Monteira, S. F., Jiménez-Aleixandre, M. P., & Siry, C. (2020). Scaffolding children's pro-

- duction of representations along the three years of ECE: A longitudinal study. *Research in Science Education*, *52*, 127-158. https://doi.org/10.1007/s11165-020-09931-z
- Naibaho, L. (2019). The effectiveness of scaffolding method on students' speaking achievement. *International Journal of Research-Granthaalayah*, 7(5), 193-201. https://doi.org/10.5281/zenodo.3238391
- Nasiri, A., & Gilakjani, A. P. (2016). A review of efl learners' speaking skill and the strategies for improvement. *Modern Journal of Language Teaching Methods*, 6(53), 56-63. https://doi.org/10.26655/mjltm.2016.12.1
- Nhi, N. T. U., & Alsaqqaf, A. (2023). Impact of a DMGA scaffolding-based module on improving the EFL speaking skills among vietnamese ESP learners. *Arab World English Journal (AWEJ)*, 14(4), 342-357. https://doi.org/10.24093/awej/vol14no4.21
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., & McGuinness, L. A. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *British Medical Journal*, 372(71), 103-112. https://doi.org/10.1136/bmj.n71
- Pishadast, A. (2022). Developing the speaking ability of EFL learners through scaffolding. *Journal of Contemporary Language Research*, 1(2), 60-64. https://doi.org/10.58803/jclr.v1i2.8
- Rajendran, T., & Yunus, M. M. (2021). A systematic literature review on the use of mobile-assisted language Learning (MALL) for enhancing speaking skills among ESL and EFL learners. *International Journal of Academic Research in Progressive Education and Development*, 10(1), 586-609. https://doi.org/10.6007/ijarped/v10-i1/8939
- Reingold, R., Rimor, R., & Kalay, A. (2008). Instructor's scaffolding in support of student's

- metacognition through a teacher education online course: A case study. *Journal of Interactive Online Learning*, 7(2), 139-151.
- Riera, I. M., & Paredes, L. A. (2023). Scaffolding strategy for encouraging speaking skills among tenth graders. *Ciencia Digital*, 7(3), 6-24. https://doi.org/10.33262/cienciadigital. v7i3.2584
- Sabnani, R. L. (2024). Strategy instruction and enhancement of young learners' speaking skills. *Language Teaching Research Quarterly*, *41*, 67-80. https://doi.org/10.32038/ltrg.2024.41.06
- Sah, P. K. (2022). Teacher preparation for primary English education in Nepal: Missing agendas of diversity and inclusion. *English Teaching & Learning*, 46(4), 373-393. https://doi.org/10.1007/s42321-021-00100-7
- Saienko, N., & Nazarenko, I. (2021). Using speaking frames as scaffolding tools to teach university students to speak in ESP. *International Journal of Learning, Teaching and Educational Research*, 20(4), 99-115. https://doi.org/10.26803/ijlter.20.4.6
- Sari, D. K., & Rozimela, Y. (2021). The implementation of scaffolding strategies at speaking English course in Kampung Inggris Pare East Java. En *Ninth International Conference on Language and Arts (ICLA 2020)* (pp. 51-56). Atlantis Press. https://doi.org/10.2991/assehr.k.210325.010
- Sarmiento-Campos, N. V., Lázaro-Guillermo, J. C., Silvera-Alarcón, E. N., Cuéllar-Quispe, S., Huamán-Romaní, Y. L., Apaza, O. A., & Sorkheh, A. (2022). A look at Vygotsky's sociocultural theory (SCT): The effectiveness of scaffolding method on EFL learners' speaking achievement. *Education Research International*, 2022(1), 3514892. https://doi.org/10.1155/2022/3514892
- Shahidzade, F., Fazilatfar, A. M., & Razmi, M. H. (2022). The correspondence between students' and teachers' views on teachers' emotional scaffolding strategies in english classes in Iran. *Frontiers in Psychology*, 13. https://doi.org/10.3389/fpsyg.2022.874747

- Shahini, G., & Shahamirian, F. (2017). Improving english speaking fluency: The role of six factors. *Advances in Language and Lite-rary Studies*, 8(6), 100-104. https://journals.aiac.org.au/index.php/alls/article/view/4012/3197
- Sim, S. P. L., Sim, H. P. K., & Quah, C. S. (2023). Impact of online instructor scaffolding strategies on students'speaking performance. *Malaysian Journal of Sustainable Environment*, 10, 105-126. https://doi.org/10.24191/myse.v0ijune.22676
- Suherdi, D. (2008). Scaffolding in junior high school (SMP) English teaching learning processes. Paper presented at the 1st International Conference on Applied Linguistics. Bandung: Universitas Pendidikan Indonesia.
- Tika, A., & Dewi, U. (2022). Using scaffolding to support students' english speaking: What does the teacher think? *English Education: English Journal for Teaching and Learning,* 10(2), 147-157. https://doi.org/10.24952/ee.v10i2.5993
- Van de Pol, J., Volman, M., & Beishuizen, J. (2010). Scaffolding in teacher-student interaction: A decade of research. *Educational Psychology Review*, 22, 271-296. https://doi.org/10.1007/s10648-010-9127-6
- Van de Pol, J., Volman, M., Oort, F., & Beishuizen, J. (2013). Teacher scaffolding in small-group work: An intervention study. *Journal of the Learning Sciences*, 23(4), 600-650. https://doi.org/10.1080/10508406.2013.805 300

- Walqui, A. (2006). Scaffolding instruction for english language learners: A conceptual framework. *International Journal of Bilingual Education and Bilingualism*, 9(2), 159-180. https://doi.org/10.1080/13670050608668639
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry*, *17*(2), 89-100. https://acamh.onlinelibrary.wiley.com/doi/10.1111/j.1469-7610.1976.tb00381.x
- Yildiz, Y., & Celik, B. (2020). The use of scaffolding techniques in language learning: Extending the level of understanding. *International Journal of Social Sciences and Educational Studies*, 7(3), 148-153. https://doi.org/10.23918/ijsses.v7i3p148
- Yuniarti, Y. (2017). Developing speaking materials based on the Common European Framework of Reference (CEFR) for increasing the students' speaking skill. *Pedagogy: Journal of English Language Teaching*, 4(2), 143-156. https://doi.org/10.32332/pedagogy.v4i2.384
- Zarandi, S. Z. A., & Rahbar, B. (2016). Enhancing speaking ability through intervening scaffolding strategies. *Theory and Practice in Language Studies*, 6(11), 2191. https://doi.org/10.17507/tpls.0611.17
- Zhou, M., & Lam, K. K. (2019). Metacognitive scaffolding for online information search in K-12 and higher education settings: A systematic review. *Educational Technology Research and Development*, 67, 1353-1384. https://doi.org/10.1007/s11423-019-09646-7