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A Systematic Literature Review on the Integration of Internet Memes in EFL/ESL Classrooms

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Abstract
As memes have become ubiquitous and embedded in the Internet and popular culture, a growing body of literature has investigated incorporating digital humor in the form of Internet memes as a new approach to increase learners' motivation and engagement. This paper conducts a Systematic Literature Review (SLR) to examine the impact of humor and meme-related pedagogical activities on language learning and to provide guidelines for incorporating meme-based learning in language classrooms. It seeks to address the following question: What is the effect of meme-related pedagogical activities in EFL/ESL classrooms? The revealed findings should encourage instructors to adopt this innovative approach to meet the needs and expectations of today's language learners. The results show that using meme-based learning in language classrooms increases learners' motivation and interest in the topic; creates a positive, fun, interesting, and engaging learning environment; enhances retention and understanding of new concepts; and simplifies complex concepts and ideas. In light of the review's findings, the paper suggests practical and instructional implications for implementing memes appropriately and effectively.

Introduction

Today's language learners bring to the classroom different needs, challenges, expectations, and attitudes. Language instructors are consequently challenged more than ever to meet these needs and expectations, build students' 21st-century skills, provide fun and engaging learning experiences and practices, and utilize innovative teaching strategies. There is also no denying that technology has become an integral part of the 21st-century learning environment. The students of the present age are immersed in virtual communities and a world of technology and digital media, which has affected and transformed the traditional classroom dynamics (Harshavardhan, Wilson, & Kumar, 2019). Hence, incorporating digital and communicative mediums inside the language classroom has become essential.

Systematic adoption of humorous Internet memes is one that "… has not only become a potent tool to engage [students] actively but also enables them to relate to the language taught in context" (Garg, 2021, p. 123). Therefore, this paper aims to answer the research question: What is the effect of meme-related pedagogical activities in EFL/ESL classrooms? It conducts a systematic literature review to examine the effect of using humorous Internet memes as external stimuli and teaching aids, which have proven to have several psychological and cognitive benefits and facilitate learning if they are implemented appropriately (Al Rashdi, 2020; Antón-Sancho, Nieto-Sobrino, Fernández-Arias, & Vergara-Rodríguez, 2022; de OLIVEIRA, 2022; Kayali & Altuntaş, 2021; Purnama, 2017; Purnama, Desiarti, Aflahah, & Ekaningrum, 2017; Romero & Bobkina, 2017; Romero & Bobkina, 2021; Zakharova, 2021). The findings should encourage language instructors to adopt memes as a pedagogical tool to enhance their classrooms with entertaining, engaging, and relevant alternatives to meet the needs and expectations of today's language learners. Thus, the paper provides guidelines for incorporating meme-based learning in language classrooms to guarantee the successful implementation of this complementary technique, so both instructors and learners can harness the benefits of memes.

The present study adopts a systematic review method as it offers several benefits. This evidence-based process allows a thorough search of all available evidence on a specific issue. SLR attempts to synthesize the results of existing literature and draws reliable and accurate conclusions. In addition, it identifies research gaps to guide future research, and it reduces bias and random errors by following a systematic method for selecting the studies to draw reliable and accurate conclusions (Gopalakrishnan & Ganeshkumar, 2013; Ham-Baloy & Jordan, 2016).

The following section reviews the literature on the roles of humor and memes in language classrooms. There will also be a discussion of the research methodology, data collection and analysis procedures, and major results. The final section introduces practical instructions for effectively implementing memes as a medium for constructing meaning.

Literature Review
Humor in Language Classrooms

Cambridge University Press (n.d.) defined humor as "… the ability to find things funny, the way in which people see that some things are funny, or the quality of being funny" (para. 1). Several studies reveal that incorporating humor appropriately in language classrooms creates a positive learning environment. In addition, it has been found that humor heightens interest, reduces

anxiety, decreases boredom, and improves productivity. It enhances learning by increasing students' cognitive absorption and retention levels and their comprehension of complex concepts and topics (Baysac, 2017; Bell & Pomerantz, 2016; Reddy, Singh, Kapoor, & Churi, 2020; Rucynski, 2021). Therefore, Harshavardhan et al. (2019) recommended using humorous references in EFL/ESL classrooms to teach the language, syntax, semantics, and pragmatics of humor. Nevertheless, Rucynski (2022) stressed that humor has a range of benefits in language teaching "…when it has value beyond the humor" (p. 6). The purpose of humor should not only be to spread laughter and create a culture of joy, but it also can be a pedagogical tool, attention grabber, and a complementary technique (Bell & Pomerantz, 2016; Harshavardhan et al., 2019; Rucynski et al., 2021). As a result, several studies have investigated incorporating digital humor in language classrooms in the form of Internet memes to enhance students' learning experience.

Memes in Language Classrooms

The term 'meme' is from the Greek "mimema," meaning 'imitated' (Britannica, n.d.). The term was introduced in 1976 by the British biologist, Richard Dawkins, in his book *The Selfish Gene* (Mariam-Webster, n.d.), and the word represented a different meaning than the current common one. Dawkins defined memes as a "… unit of cultural information spread by imitation" (Britannica, n.d., para. 1). He proposed that any element of culture that is nongenetic behavior be labeled as a meme (Davison, 2012). Today, the term 'meme' refers to "[A]n amusing or interesting item (such as a captioned picture or video) or genre of items that is spread widely online, especially through social media" (Merriam-Webster, n.d., para. 1). The digital representation of the meme is referred to as an 'Internet meme' (Harshavardhan et al., 2019). Internet memes refer to images, ideas, events, or behavior that are characterized as being humorous, witty, and multimodal (Baysac, 2017). They spread across the Internet and are frequently shared on social media, allowing people to duplicate them for making social commentary, eliciting laughter and plain mockery, or referring to a recent or viral real-life event (Matias, 2022; Rucynski, 2022).

This multimodal interaction between language and image has attracted linguists to study this phenomenon in education since memes have already become massively incorporated into students' lives. Today, Internet memes consider an optimal addition that can be used occasionally to harness learners' digital abilities, improve their digital and media literacy, teach the structure and features of English, and deepen their knowledge of cultural references used in memes (Harshavardhan et al., 2019; Reddy, et al., 2020; Rucynski, 2022). de OLIVEIRA (2022) reported several benefits of using memes in the virtual learning environment. They boost students' cognitive and communicative skills in L2; increase their awareness of the relationship between language and culture; and improve their pragmatic competence and inferential abilities. Kayali and Altuntaş (2021) also found that using memes has several positive effects. It increases students' attention, interest, and creativity. It helps build vocabulary, boosts memory retention, and keeps learners engaged. In addition, using memes helps reduce students' anxiety while learning a new language. Zakharova (2021) concluded that memes are a powerful and practical tool in language classrooms. They increase students' motivation, engagement, and productivity.

Yet, several studies have revealed that language learners may face challenges when using memes, which may limit their usability in language classrooms. Antón-Sancho et al. (2022) found that the usability of memes in virtual environments in higher education was intermediate due to

several reasons: the challenges of achieving some objectives using humorous resources as a method; ethical issues (e.g., the risk of offending or insulting a particular social group); and the risk of misusing memes as a humorous resource instead of an effective learning tool. Romero and Bobkina (2021) noted that while language learners can decode the literal or descriptive meanings of memes, they may face difficulties interpreting the cultural meanings of the text and identifying their supposed intentions. Al Rashdi (2020) also reported that the participants had problems eliciting the hidden messages in memes related to complex topics because it requires familiarity with the target culture and exposure to social media. Nevertheless, there is a lack of research to tackle these challenges and guide language instructors on how to implement meme-based activities in EFL/ESL classrooms appropriately. Thus, this paper attempts to fill the gap in this domain by providing guidelines for integrating meme-based learning into language classrooms to guarantee the successful implementation of this interactive tool.

Methodology
Research Instrument
A Systematic Literature Review (SLR) is used to answer the research question. SLR is "… a review using a systematic method to summarize evidence on questions with a detailed and comprehensive plan of study" (Tawfik et al., 2019, p. 1). This method identifies, summarizes, evaluates, and synthesizes various studies to answer a specific research question and contribute to the literature. SLR uses explicit, systematic, rigorous, and well-thought plans. In addition, it identifies the type of references, the search keywords and phrases, the search strategy, and the inclusion and exclusion criteria of the selected studies to reduce the risk of bias and increase their reliability. Several databases were searched to find primary studies on the topic under investigation (i.e., ERIC, JSTOR, ScienceDirect, and Scopus). In addition, Internet engines, namely, Google Scholar, were searched to provide more references. This study conducted the SLR based on the guidelines of Khan, Kunz, Kleijnen, and Antes (2003). They propose five steps to conducting SLR. They are as follows:
1. Framing the research question
2. Identifying relevant publications
3. Assessing study quality
4. Summarizing the evidence
5. Interpreting the findings (discussion)

Research Procedures
Step 1: Framing Research Questions
This paper addresses the following question: What is the effect of meme-related pedagogical activities in EFL/ESL classrooms? Answering this question requires reviewing and synthesizing the available evidence and existing works on this topic. The following section describes the review method and explains the procedures involved at each stage.

Step 2: Identifying Relevant Publications
Establishing the Inclusion and Exclusion Criteria
The following inclusion criteria were used to exclude irrelevant papers (see table one).
1. The search phrases and keywords used were "memes" AND "learning," "memes" AND "EFL/ESL," and "humorous memes" AND "language learning."

2. This review only examined papers in the subject area of language education and EFL/ESL.
3. The papers must be written in English.
4. The researcher must have full access to the papers and journals.
5. The review only included the articles that were published within the timeframe of 2017 until 2022.
6. The review included journal/research articles and excluded documents, such as chapters and conference papers.

Table 1. *Inclusion and exclusion criteria*

Inclusion Criteria	Details
Keywords	"memes" AND "learning"
	"memes" AND "EFL/ESL"
	"humorous memes" AND "language learning"
Subject area	Language Education, EFL/ESL
Language	English
Access	Full access
Publication year	2017-2022

Search Strategy

To locate as much relevant literature as possible, the researcher followed a 'search strategy' considering the previously mentioned inclusion and exclusion criteria. Several databases were searched to identify and find primary studies on the effects of memes in language teaching and learning (i.e., ERIC, JSTOR, ScienceDirect, and Scopus). In addition, Internet engines, namely, Google Scholar, were searched to provide more references. The initial literature search, using the keywords and phrases, resulted in 233 articles. Their potential relevance was examined, and 207 papers were excluded as irrelevant because they did not meet the inclusion criteria (i.e., subject area, full access, publication year, and language). The remaining 26 papers were further examined to select the studies that directly relate to incorporating memes into EFL/ESL classrooms (see Figure one). The selected nine articles were thoroughly assessed using a quality assessment checklist for final selection.
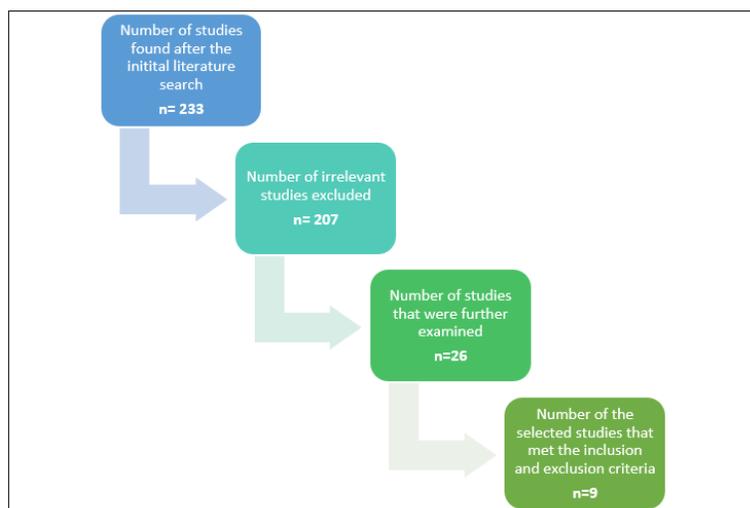

Figure 1. Search phases

Step 3: Assessing Study Quality

In addition to the inclusion and exclusion criteria, it is crucial to validate the quality of the primary studies. Kitchenham and Charters (2007) argue that using a quality assessment checklist allows to "… provide still more detailed inclusion/exclusion criteria and investigate whether quality differences explain differences in study results" (p. 20). As seen in table two, five questions were adapted from Kitchenham and Charters' quality questions checklist to assess the quality of the selected articles. Kitchenham and Charters (2007) do not recommend researchers use all their proposed questions. Instead, researchers should select the quality assessment questions that are appropriate and relevant to the context of their studies. The answers were scored as follows: (Yes= 1 point), (No= 0 point), and (Partially= .5 point). The total sum score of each paper ranged between 1-5 and assigned the following levels of quality (5= very good), (4= good), (3= acceptable), (2= poor), and (1= very poor).

Table 2. *Quality assessment questions adapted from Kitchenham and Charters (2007)*

	Question	Answer
Q1	Are the aims clearly stated?	Yes/No/Partially
Q2	Are the data collection methods adequately described?	Yes/No/Partially
Q3	Is the population being studied clearly defined?	Yes/No/Partially
Q4	Are the results interpreted and reported clearly?	Yes/No/Partially
Q5	Do the findings reveal the positive impacts of incorporating memes in language classrooms?	Yes/No/Partially

Quality Scores

Table three summarizes the quality assessment scores of the selected nine articles. After assessing the articles, based on the five questions, the results show that six articles (66.67%) are of a 'very good quality' while the remaining three (33.33%) are of a 'good quality.' None of the selected articles scored below four points. Therefore, all of the nine articles qualified for the systematic literature review. See appendix A for a detailed analysis of the papers' quality assessment.

Table 3. *Quality assessment scores*

Level of Quality	Very good	Good	Acceptable	Poor	Very poor	Total
Number of studies	6	3	0	0	0	9
Percentage	66.67%	33.33%	0	0	0	100%

Step 4: Summarizing the Evidence

The following section provides background information about each study (i.e., the setting, participants, and data collection method) and summarizes the major findings to answer the research question. The reviewed articles are arranged in chronological order—starting from the most recent (2022) to oldest (2017).

Antón-Sancho et al. (2022)

A survey was used to collect data from 401 college instructors from various departments and 19 Latin American countries. The study investigated the perceptions of college instructors on using humorous resources in virtual learning environments. The findings revealed that while the valuation of memes in virtual environments was high, its usability in virtual environments in higher education was intermediate due to several reasons: the challenges of achieving some objectives using humorous resources as a method; ethical issues (e.g., the risk of offending or insulting a particular social group); and the risk of misusing memes as a humorous and amusement resource instead of an effective learning tool.

de OLIVEIRA (2022)

Data were collected from 10 students (ages 12-15 years old) using a didactic unit. The unit was designed for the virtual learning environment and utilized humorous memes, games, and role-playing. The study aimed to increase students' motivation to learn during the pandemic by using funny memes and technology. The researcher received positive feedback from the participants. In addition, using memes in a virtual learning environment was found to boost students' cognitive and communicative skills in L2; increase their awareness of the relationship between language and culture; and improve their pragmatic competence and inferential abilities.

Kayali and Altuntaş (2021)

An experiment was conducted to collect data from 38 Turkish students (ages 17-20 years old). The study investigated the effect of using memes on vocabulary recall. Memes were found to increase students' attention, interest, and creativity. They helped build vocabulary, boosted memory retention, and kept learners engaged. The participants revealed that they enjoyed this method of learning vocabulary, rather than the traditional method, which can be tedious. In addition, using memes helped reduce students' anxiety while learning a new language. Memes shifted students' focus from the stress of learning a new language to acquiring the language skills unconsciously.

Romero and Bobkina (2021)

Data were collected from 52 Spanish undergraduate students (aged between 21-23); they completed a questionnaire and meme-based task. The study investigated students' abilities to decode the visual symbols in texts; activate their background knowledge; be aware of social and cultural functions of visual texts; identify biases; and think analytically when using visual texts. Most of the participants performed well at decoding the literal or descriptive meanings in memes. Yet, the researchers found that the participants lacked critical and visual literacy skills. They faced difficulties interpreting the cultural meanings of the text, identifying its supposed intentions, and designing new memes in response to the first.

Zakharova (2021)

An experiment was conducted to collect data from 74 Russian undergraduate students divided into control and experimental groups. The article examined the effectiveness of memes in increasing learners' motivation to study a foreign language. Memes were found to be a powerful and practical tool in language classrooms. They raised the participants' engagement and productivity in group and individual tasks. They were also effective in increasing students' motivation to learn.

Al Rashdi (2020)

Data were collected from 29 Omani undergraduate students; they completed a questionnaire about their perceptions of memes. The study examined the students' abilities to infer pragmatic meaning from memes and their perceptions of using memes in language learning and teaching. The participants had positive attitudes towards memes, and they reported that memes enhanced their critical thinking skills. However, the participants had difficulties eliciting the hidden messages in memes that related to complex topics, such as politics and poverty, because it required familiarity with the target culture and exposure to social media.

Purnama (2017)

The instruments used in this research were observation and questionnaires. The participants of the study were 23 undergraduate Indonesian students. The study aimed to have a better understanding of the role of incorporating activities, such as memes creation, in EFL classrooms to support language learning. The participants enjoyed using the memes creation activity. Incorporating memes in the learning and teaching process kept the students engaged and attentive while learning new information. Therefore, it enabled the participants to comprehend the topics under discussion using an easy, fun, and enjoyable tool. The results also revealed that creating memes was not a complex activity since students, nowadays, have access to smartphone and image editing applications.

Purnama et al. (2017)

Observation and email interviews were used in this study to collect data from 50 Indonesian undergraduate students. The study examined the effect of using memes to enhance the performance of language learners and boost their motivation. The results showed that using memes as a learning activity in EFL classrooms is authentic, engaging, and fun. It increased the participants' intrinsic motivation and interest in intercultural communication. The participants reported positive responses to the meme creation activity. The activity was practical, enhanced their pragmatic skills, and allowed learners to engage in meaningful tasks to display their skills and language mastery.

Romero and Bobkina (2017)

Data were obtained through an experiment and questionnaire. The study was divided into two parts. The first part involved 20 Spanish graduate students who had four weeks of the workshop to enhance their understanding of the crucial role of visual literacy, mainly memes. The second part included 33 C1 level students (aged between 20 and 45) divided into two groups. The experiment group used memes as part of a 20-minute, warm-up listening activity. The study suggested a pedagogical proposal for implementing a meme-based visual technique in EFL/ESL

classrooms. The graduate students reported positive responses and feedback towards the workshop experience and supported the importance of teaching visual literacy through memes in EFL/ESL classrooms. They agreed to approach language learners as viewer learners who require visual literacies beyond traditional linguistic skills. The results also demonstrated the benefits of visual literacy, specifically the implementation of memes, in the acquisition of listening.

Step 5: Discussion

All of the nine reviewed articles have found memes to be significantly beneficial if implemented appropriately. Aside from being a fun and innovative way to spark moments of laughter in the classroom, the studies have revealed positive results and attitudes toward memes among instructors and students (Al Rashdi, 2020; Antón-Sancho, et al., 2022; de OLIVEIRA, 2022; Kayali & Altuntaş, 2021; Purnama, et al., 2017; Purnama, 2017; Romero & Bobkina, 2017; Romero & Bobkina, 2021; Zakharova, 2021). The major findings from the systematic review are summarized as follows and answer the research question: What is the effect of meme-related pedagogical activities in EFL/ESL classrooms?

1. Since memes allow to combine fun with learning, they create a positive teaching and learning environment. They can lower learners' affective filter and increase their attention, interest, and productivity. Thus, they can shift students' focus from the stress of learning a new language to acquiring language skills unconsciously.
2. They are effective stimuli for increasing students' engagement and intrinsic motivation to learn, so they can easily absorb and digest the new content.
3. Meme-based activities, such as meme creation, allow learners to be engaged in meaningful and authentic tasks and to display their skills and language mastery.
4. Instead of using the traditional method of memorizing new words, which can be tedious, using memes has been found to build learners' vocabulary and boost their memory retention.
5. Visual literacies in the form of memes can boost students' cognitive skills. However, its successful usability relies on considering the following elements: the learning objective(s), the topic, and the purpose of using the memes to avoid the risk of misusing memes as a humorous and amusement resource instead of an effective learning tool (Antón-Sancho et al., 2022).
6. They can increase learners' interest in intercultural communication and their awareness of the relationship between language and culture. However, students may have difficulties interpreting the cultural meanings of the text and identifying their supposed intentions if they do not have sufficient background knowledge about the target culture, as Romero and Bobkina (2021) have found in their study.
7. They are effective teaching aids for enhancing students' critical thinking skills as they can improve their pragmatic competence and inferential abilities. Yet, students may face some challenges in eliciting hidden messages in memes that relate to complex topics (e.g., politics and poverty), as they require familiarity with the target culture and exposure to social media (Al Rashdi, 2020).

The results show that memes are a welcome addition to language classrooms and an effective teaching tool whether created for the students or created by them. They do not diminish the role of textbooks; however, they encourage instructors to be open to using memes in their classrooms instead of relying on conventional learning techniques. Instructors can employ memes

to help learners grasp complex concepts, ideas, and topics and to provoke them to think, analyze, and debate to stimulate their critical thinking, cognitive, communicative skills, and more. Therefore, the following section provides guidelines to overcome the potential challenges of using memes as a pedagogical tool and proposes practical instructions for integrating meme-based activities.

1. Instructors should take into account essential elements before implementing a meme-based activity. These elements relate to the learning objective; topic; and learners' age, gender, culture, proficiency levels, and knowledge of the target culture (Reddy et al., 2020).
2. In addition, Reddy et al. (2020) have identified two major elements for selecting memes for teaching and learning purposes; they are "… the amount of humor and the amount of information in it" (p. 119). They assert that instructors need to expose students to balanced memes that contain appropriate humor and adequate information to reach desirable results.
3. Harshavardhan et al. (2019) have suggested using memes as part of the curriculum. Here are some ideas, which are based on research, on how to include humorous memes in language classrooms.
3.1. Memes can be adapted to reinforce class rules with humor and in a less threatening approach.
3.2. Memes can be added to PowerPoint Presentations (PPTs). Well-known international organizations, such as IELTS (International English Language Testing System), insert humorous memes in PPTs, which indicates the significant role of memes in language teaching and learning (Garg, 2021; Harshavardhan et al., 2019).
3.3. Memes can be used to teach and introduce new content (e.g., chapters, grammar rules, novels, short stories, and more). It also can be utilized as an ice-breaking or warm-up activity to set the mood of the class and spark moments of laughter. Harshavardhan et al. (2019) list several ideas to incorporate memes in teaching,
The digital text in memes can be used to teach a wide range of sentence patterns.
Tenses and the differences between one tense and the other can be elucidated.
Linguistic theories, like interlanguage, are clearly defined and illustrated. The
nuances of pronunciation and the influence of the mother tongue are clearly
portrayed. The semantics of grammatically incorrect sentences is focused upon, and
errors are easily highlighted. (p. 52)
3.4. Memes can be used for revision or to summarize a section in a chapter, novel, or short story since they have been proven to promote retention and recall of course material.
3.5. Memes are effective in teaching vocabulary and helping students learn, retain new vocabulary, and have fun while doing it. They also can be adapted to explain complex concepts. Garg (2021) concluded that "Internet memes never solve the problem of complex concepts, but it simplifies the complex procedure of any topic taught by the teacher" (p. 123).
3.6. A meme creation activity is one way to get students to think outside the box and express themselves creatively (Garg, 2021). Learners can create a meme to define a new concept, put new vocabulary in a sentence, practice writing, and more. However, before assigning a meme-creation task, instructors must teach a lesson on memes and provide examples and instructions on how they should be used to complete the task. In addition, instructors should carefully choose the meme-creation tools that are assigned to students to ensure they are appropriate for students.

Follow-up studies should take into consideration the limitations of this study. The systematic literature review was the primary method to collect and analyze data. Although systematic reviews have many advantages, they are not immune to errors. More research is needed using other methods (e.g., observations, interviews, and experiments). Employing different modes of data collection can provide a better insight into the role of memes in language learning and increase the potential to gather reliable data that cannot be solely obtained via systematic reviews. Also, there is still a shortage of research to tackle and overcome the potential challenges language instructors may encounter when using memes. Therefore, future research is needed to study the integration of memes in a longitudinal way, test their usability, and provide guidelines for the effective implementation of meme-related pedagogical activities.

Conclusion

The field of education has undergone a significant paradigm shift due to the development of the Internet and technology. Language learners are immersed in virtual communities that have transformed traditional classroom dynamics. Thus, it has become imperative to adopt novel approaches to meet the needs of today's learners. The current systematic literature review has thoroughly examined nine articles to identify the impact of humor and meme-related pedagogical activities on language learning. While the findings suggest that memes are a powerful and practical tool, their successful usability relies on considering several elements, such as the learning objectives, topic, learners' demographics, and the amount of humor and information. The paper also suggests several implications to guarantee the successful implementation of this complementary technique, so both instructors and learners can harness the benefits of memes.

About the Author

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References

Al Rashdi, M. (2020). A small-scale exploratory study on Omani college students' perception of pragmatic meaning embedded in memes. *Arab World English Journal,* 298-313. Proceedings of 2nd MEC TESOL Conference.10.24093/awej/MEC2.22

Antón-Sancho, Á., Nieto-Sobrino, M., Fernández-Arias, P., & Vergara-Rodríguez, D. (2022). Usability of memes and humorous resources in virtual learning environments. *Education Sciences, 12*(208), 1-15. 10.3390/educsci12030208

Baysac, P. (2017). Laughter in class: Humorous memes in 21st century learning. *Journal of Social Sciences, 6*(2), 267-281. 10.25255/jss.2017.6.2.267.281

Bell, N., & Pomerantz, A. (2016). *Humor in the classroom: A guide for language teachers and educational researchers.* New York, NY: Routledge.

Britannica. (n.d.). Meme. In *Encyclopedia Britannica.* Retrieved from https://www.britannica.com/topic/meme

Cambridge University Press. (n.d.). Humor. In *Cambridge Dictionary*. Retrieved from

https://dictionary.cambridge.org/dictionary/english/humour

Davison, P. (2012). *The language of Internet memes.* Retrieved from
http://spring2017.designforthe. net/content/6-library/12-language-of-internet-memes/language-of-internet-memes_michaelmandiberg.pdf

de OLIVEIRA, V. (2022). Technology and humor: sample lessons to keep English
learning functional during pandemic times. *Entrepalavras, 11*(3), 1-23. 10.22168/2237-6321-32236

Garg, R. (2021). Memes: creative technological strategy for ESL learners. *Language in India, 21*(12), 122-130.

Gopalakrishnan, S., and Ganeshkumar, P. (2013). Systematic Reviews and Meta-analysis:
Understanding the best evidence in primary healthcare. *Journal of Family Medicine and Primary Care, 2*(1), 9-14. 10.4103/2249-4863.109934

Ham-Baloyi, W., and Jordan, P. (2016). Systematic review as a research method in postgraduate
nursing education. *Health Sa Gesondheid, 21*, 120-123. 10.4102/hsag.v21i0.942

Han, Y. (2019). Memeing to learning: Exploring meaning-making in a language-learning chat group.
Technology in Language Teaching & Learning, 1(2), 68-90. 10.29140/tltl.v1n2.191

Harshavardhan, V., Wilson, D., & Kumar, D. (2019). Humor discourse in Internet memes: An aid in
ESL classrooms. *Asia Pacific Media Educator, 29*(1), 41-53.
10.1177/1326365X19842023

Kayali, N., & Altuntaş, A. (2021). Using memes in the language classroom. *International
Journal of Education, 9*(3), 155-160. 10.34293/ education.v9i3.3908

Khan, K., Kunz, R., Kleijnen, J., & Antes, G. (2003). Five steps to conducting a systematic
review. *Journal of the Royal Society of Medicine, 96*(3), 118-121. 10.1258/jrsm.96.3.118

Kitchenham, B., & Charters, S. (2007). *Guidelines for performing systematic literature reviews
in software engineering.* Retrieved from file:///C:/Users/ASUS/Downloads/Kitchenham-2007Systematicreviews5-8%20(1).pdf

Mariam-Webster. (n.d.). Meme. In *Mariam-Webster Dictionary*. Retrieved from
https://www.merriam-webster.com/words-at-play/meme-word-origins-history#:~:text=The%20Origin%20of%20Memes,its%20current%20most%20common%20one

Matias, K. (2020). Integration of Internet memes in teaching social studies and its relation to the
development of critical thinking skills: A literature review. *Global Scientific Journals, 8*(12), 859-867.

Purnama, A. (2017). Incorporating memes and Instagram to enhance student's participation.
Language and Language Teaching Journal, 20(1), 1-14. 10.24071/llt.2017.200101

Purnama, A., Desiarti, E., Aflahah, N., & Ekaningrum, V. (2017). Utilizing memes to promote
students' motivation in language classroom. *Linguistics, Literature and Language Teaching Journal, 7*(2), 134-153.

Romero, E., & Bobkina, J. (2017). *Teaching visual literacy through memes in the language
classroom.* Retrieved from file:///C:/Users/ASUS/Downloads/-the-image-in-english-language-teaching-2017%20(2).pdf

Romero, E., & Bobkina, J. (2021). Exploring critical and visual literacy needs in digital
learning environments: The use of memes in the EFL/ESL university classroom.

Thinking Skills and Creativity, 40, 1-16. 10.1016/j.tsc.2020.100783

Rucynski, J. (2022). *Humor in ELT (Part 2): Classroom techniques.* Retrieved from
        http://newsmanager.commpartners.com/tesolc/downloads/features/2022/2022-
        06_Humor%20in%20ELT-Part%202_Rucynski.pdf

Ruckynski, J., & Prichard, C. (2021). *Implementing humor instruction into English language
        teaching.* Retrieved from https://americanenglish.state.gov/files/ae/resource_files/59_3_
        pg02-13.pdf

Reddy, R., Singh, R., Kapoor, V., & Churi, P. (2020). Joy of learning through Internet memes.
        International Journal of Engineering Pedagogy, 10(5), 116-133.
10.3991/ijep.v10i5.15211

Tawfik, G. et al. (2019). Step by step guide for conducting a systematic review and meta-
analysis with
        simulation data. *Tropical Medicine and Health, 47*(46), 1-9. 10.1186/s41182-019-0165-6.

Zakharova, O. (2021). Internet memes as a way of developing future engineers' motivation to
        study a foreign language in their professional activity. *Education and Pedagogy Journal,
        2*(2), 57-65. 10 23951/1609-624X-2021-2-7-16

Appendices
Appendix A
Study Quality Assessment

Selected Articles	Q1	Q2	Q3	Q4	Q5	Total
						Level of Quality
1. Antón-Sancho et al. (2022)	Yes	Yes	Yes	Yes	Partially	4.5 Good
2. de OLIVEIRA (2022)	Yes	Yes	Yes	Yes	Yes	5 Very good
3. Kayali and Altuntaş (2021)	Yes	Yes	Yes	Yes	Yes	5 Very good
4. Romero and Bobkina (2021)	Yes	Yes	Yes	Yes	Partially	4.5 Good
5. Zakharova (2021)	Yes	Yes	Yes	Yes	Yes	5 Very good

6. Al Rashdi (2020)	Yes	Yes	Yes	Yes	Yes	5 Very good
7. Purnama et al. (2017)	Partially	Yes	Yes	Yes	Yes	4.5 Good
8. Purnama (2017)	Yes	Yes	Yes	Yes	Yes	5 Very good
9. Romero and Bobkina (2017)	Yes	Yes	Yes	Yes	Yes	5 Very good