Blended Learning for Improving English Writing Skills among University Students: A Systematic Literature Review

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Abstract
Blended learning is an emerging and innovative pedagogical advancement in education. However, there is a lack of review on the improvement of blended learning on university students’ English writing ability. To address this gap, this paper provides a systematic review of research published between 2013-2023 on the use of blended learning in undergraduate English writing courses. The aim of this study is to investigate the use of blended learning in improve students’ English writing skills, students’ perceptions of blended learning in improving English writing skills, and the challenges they faced. Guided by the PRISMA statement (Prefered and Reporting Items for Systematic Reviews and Meta-Analyses), 15 relevant studies were identified through a systematic review of Scopus and Web of Science databases. The findings of the study also highlighted students’ perceptions and challenges faced in using blended learning to improve their English writing skills. It is concluded that the use of blended learning in English writing courses is an effective tool to improve students’ English writing skills, and that students mostly held positive attitudes towards the application of blended learning to English writing courses. This study enables a synthesis of existing research in related fields to produce a more comprehensive and in-depth understanding of the application of blended learning in English writing courses. These findings contribute to a deeper understanding of the role and impact of blended learning on students’ ability to improve their English writing skills, and provide valuable insights for future research on blended learning more broadly.

Keywords: Blended Learning, English Writing Skills, Systematic Literature Review Analysis, University Students

Introduction
Writing is the most concentrated and accurate expression of comprehensive English proficiency and a skill that any college student must master. Writing ability is especially crucial to the academic, social and professional success of students as they will soon embark on their
career journey. Blended learning has received a lot of attention as an English language teaching method that has a positive impact on improving students’ writing skills (Quvanch & Na, 2020). However, writing is a complex process that requires knowledge, skills and creativity. Currently, it is easier than ever for individuals to improve their writing skills due to advances in technology. By synthesising existing research, it is easy to see that numerous researchers in different countries and regions are interested in and have conducted studies on the effectiveness of blended learning in improving writing skills. However, there is still a lack of a systematic review of existing studies on blended learning in improving college students’ English writing ability, and the researchers believes that such a systematic review can help researchers to have a more comprehensive understanding of this field of study and also broaden the horizons for subsequent studies.

Towards a systematic review framework on blended learning improving English writing skills among university students

A systematic review is the use of an explicit methodology to answer a well-defined research question; it involves a comprehensive literature search, a critical assessment of the quantity and quality of the research evidence, and an analysis of the evidence (qualitative or quantitative) to synthesise an answer to the research question (Sataloff et al., 2021). Systematic reviews provide a more objective way of interpreting and processing the unmanageable amount of available research data to provide a basis for rational decision making. For researchers, conducting a systematic review is essential before starting any new study because it provides background information on what is known and prevents wasting research resources on questions that have already been explored and adequately answered. A systematic review can summarise what is known about a particular topic and identify gaps in knowledge (Mulrow, 1994).

Although there have been many studies on blended learning integrating mobile apps for improving English writing skill, attempts to conduct a systematic review of these studies are still limited. Therefore, this study will fill this gap by analysing and investigating the effects of blended learning integrating mobile apps on students’ English writing skills, the effects of using blended learning in English writing courses, and the challenges encountered by students in using mobile apps for blended learning is analysed and studied.

Objectives

This study attempts to analyse
a. To investigate the students’ improvement of English writing skills using blended learning.
b. To study the students’ perception of using blended learning to improve their English writing skills.
c. To identify the challenges that students encountered in using blended learning in their English writing courses.

Methodology

This section discusses the methods used to retrieve and collect articles related to the use of blended learning integrating mobile apps to enhance English writing skills. The PRISMA methodology has been adopted by the researchers and includes the resources used to conduct systematic reviews (Scopus and Web of Science), eligibility and exclusion criteria, steps in the review process (identification, screening, eligibility), and data abstraction and data analysis.
PRISMA
The review was guided by the PRISMA Statement (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). The PRISMA Statement is an appropriate methodology for fully and accurately including relevant literature and for excluding any irrelevant literature (Oláh et al., 2020). The unique advantage of the PRISMA method is that its systematic approach provides a clear definition of the research question, identification of inclusion and exclusion criteria, and a systematic search of the literature. and literature search from large literature databases within a specified time frame (Suhaimi et al., 2021). The application of blended learning integrating mobile apps in English writing teaching and its role in improving students’ writing ability can be rigorously studied through PRISMA Statement.

Resources
This review relies heavily on two journal databases - Scopus and Web of Science (WoS). Scopus is the world’s largest abstract- and citation-based database launched by Elsevier Publishing Group, which includes 22,800 journals from 5,000 publishers around the world, including a large number of conference papers and non-English papers. Scopus is a comprehensive collection of databases covering the fields of natural sciences, life sciences, medical sciences, social sciences, and so on. Its users have access to the most comprehensive collection of forward-looking scientific and technical literature in the world. Web of Science is the world’s largest comprehensive academic information resource covering the most disciplines, including the most influential 8850 (SCI), 3200 (SSCI) and 1700 (AHCI) core academic journals in various research fields such as natural sciences, engineering technology and biomedicine. Web of Science launched the Impact Factor or IF which is a journal’s impact factor, that refers to the average number of citations in the current year of the literature published in the first two years of the journal. Now, it has become an international common evaluation index of journals, which is not only an index to measure the usefulness and display of journals, but also an important index to measure the academic level of journals and even the quality of papers.

Eligibility and Exclusion Criteria
The researcher identified several eligibility and exclusion criteria. First, in terms of the type of literature, only articles with empirical data were selected, which means that systematic review articles, book serials, monographs, book chapters and conference proceedings would not be considered. Secondly, this review only focuses on articles published in English and excludes non-English publications, this is to avoid misunderstanding due to translation and other factors when reviewing articles. Thirdly, in terms of time span, a 10-year period (2013 to 2023) was chosen, which is sufficient to observe the evolution and trends of the research and to ensure that the content of the literature is up-to-date and contemporary. Since the focus of this study is on the role of blended learning in improving students’ English writing, only articles from social science-based indexes were selected, without focusing on articles published in hard science indexes (Science Citation Index Expanded) (see Table 1).
Table 1

**Inclusion and exclusion criteria**

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<th>Criterion</th>
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<td>Literature type</td>
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**Systematic Review Process**

The systematic review process was divided into four phases, namely screening, eligibility and review. The systematic review process was conducted in October 2023. The first stage identified keywords to be used in the search process. The researcher referred to previous studies and thesaurus to identify suitable keywords and used keywords related to blended learning, mobile apps, writing skills and university students (see Table 2). At this stage, duplicate articles were removed after careful screening. Duplicate articles are those that can be found in both databases used in this review.

Table 2

**The search string used for the systematic review process.**

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<th>Databases</th>
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<td>Scopus</td>
<td>TITLE-ABS-KEY= ((&quot;blended learning&quot; OR &quot;blended&quot;) AND (&quot;English writing*&quot; OR &quot;writing skill*&quot; OR &quot;writing ability*&quot; ) AND (&quot;university*&quot; OR &quot;undergraduate*&quot; OR &quot;higher education&quot; ))</td>
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<td>Web of Science</td>
<td>TS= ((&quot;blended learning&quot; OR &quot;blended&quot;) AND (&quot;English writing*&quot; OR &quot;writing skill*&quot; OR &quot;writing ability*&quot; ) AND (&quot;university*&quot; OR &quot;undergraduate*&quot; OR &quot;higher education&quot; ))</td>
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The second stage was screening. In this stage, 35 articles were excluded from a total of 67 articles eligible for review. The third stage was the eligibility screening in which the full text of the articles was reviewed by the researchers. After a thorough review, a total of 12 articles were excluded because some of the articles did not focus on English writing skills, were not empirical studies, or did not apply blended learning. After the final stage of review, a total of 20 articles were used for qualitative analysis (see Figure 1).
Data Abstraction and Analysis

The remaining selected articles were evaluated and analysed. Data was extracted by first reading the abstracts and then the full text in depth to identify appropriate themes and sub-themes. Qualitative analysis was conducted using content analysis to identify relevant themes. Sub-themes were then organised around the themes identified by the typology. Narrative summaries were conducted. Narrative summaries typically involve the selection, documentation, and sequencing of evidence, chronicling and sequencing of evidence to develop a narrative of the evidence. In systematic reviews, narrative summaries are often used in conjunction with systematic search and evaluation techniques. Narrative summaries can “integrate” qualitative and quantitative evidence through juxtaposition of narratives - discussing different forms of evidence side by side (Dixon-Woods, 2005).
Results

The results of the review were categorised into four major themes that comprised of the tools used in blended learning to improve students’ English writing skills, students’ improvement of English writing skills using blended learning, students’ perceptions of the use of blended learning in improving their English writing skills, and the challenges students faced in using blended learning in their English writing courses. The results of the study comprehensively analysed the effectiveness of using blended learning to improve undergraduate students’ English writing skills (see table 3). The numbering in the following text is based on the numbering in Table 3 and is not related to the reference list.

Study Characteristics

Four studies were from China (Wang & Huang, 2020; Chen, 2021; Sun & Asmawi, 2023; Meng, 2023), two studies were from the Philippines (Ebron & Mabuan, 2021; Hajan & Padagas, 2021) and one study was from South Korea (So & Lee, 2013); Thailand (Dawilai et al, 2017), Japan (Dawilai et al, 2021); Malaysia (Leduning & Wah, 2013), the United States (Geithner & Pollastro, 2015), Canada (Stouck, 2019), Saudi Arabia (Chatta & Haque, 2020) and the United Kingdom (Russo et al., 2022). A further study focused on curriculum implementation in six European Union countries - Croatia, Latvia, Slovenia, Romania, Poland and the Czech Republic (Luka, 2021). Four studies used quantitative research designs (Dawilai et al., 2017; Stouck, 2019; Dawilai et al., 2021; Meng, 2023) and one study used a qualitative research design (Ebron & Mabuan, 2021). Ten studies used a blended research design (So & Lee, 2013); Leduning & Kean, (2013); Geithner & Pollastro (2015); Chatta & Haque (2020); Wang & Huang (2020); Hajan & Padagas (2021); Luka (2021); Chen (2021); Russo et al (2022); Sun & Asmawi (2023) in order to investigate the impact, perceptions, and challenges of using blended learning in improving students’ English writing skills. The sample sizes of the studies ranged from 17 to 425.

Tools used in blended learning to improve students’ English writing skills

Blended learning is an emerging and innovative pedagogical advancement in education (Soler, 2017), and many new approaches have been devised in order to design and apply this new way of teaching and learning (Fu & Wang, 2020). In order to cater to specific pedagogical requirements and teaching environments, foreign language practitioners usually need to use specific frameworks and Learning Management Systems (LMS) or online platforms for blended learning. This study found that most of the practitioners in the selected studies used various types of technologies, frameworks, platforms, and online resources to help them achieve their pedagogical goals when developing English writing courses for blended learning.

This study identifies the technologies and pedagogical methods applied in the selected studies. Out of these 15 studies, four articles indicated that teachers used digital platforms instead of the official LMS in their courses [2, 8, 11, 12, 13]. Three articles reported that teachers used specific tools or technologies in conjunction with the official LMS (i.e., Moodle) [1, 6, 10]. Another group of six articles in total indicated that teachers use hybrid courses with certain application of frameworks or models for their teaching [3, 4, 5, 7, 9, 11, 15].

Chen’s (2021) study incorporated five types of technology in the curriculum to help students learn to write: (1) blogs (for students to write freely); (2) multimedia files (PPTs and audio-visuals); (3) Moodle; (4) useful websites for learning to write and (5) mobile assisted language learning (MALL) materials. For example, WeChat Public Platform (WPP) used in the Chen’s (2021) study, which is generated by the well-known social app WeChat. Users can access messages, texts, images, videos and audios through WPP. The fragmented learning model
created by this type of platform overcomes the temporal and spatial constraints that traditional English writing instruction imposes on the classroom, allowing for the integration of English across time, place, and learning resources (Fu & Wang, 2020).

**Students’ improvement of English writing skills using blended learning**

The aspects of using blended learning to improve students’ English writing skills varied across all 15 studies. The areas in which students’ writing ability was improved can be categorised into the following seven areas: Writing output, Creative writing, Learning Flexibility, Critical thinking, Online Collaboration, Academic writing, and Emotional aspects.

Six studies assessed students’ progress based on writing output [6-11]. Ebron and Mabuan’s (2021) findings indicated that the main benefit students received was greater improvement in their writing scores. According to the students’ feedback, due to the specific written feedback from the instructor throughout the teaching and learning process served as a guide to improve their essays. In addition, students were able to be motivated them to produce better output. The immediacy and centrality of the feedback to the task was an important factor in their motivation. Corrective feedback is useful because it promotes motivation and ensures linguistic accuracy (Ellis, 2009). Also, by having more opportunities to interact with the teacher, students became more interested and inspired to learn to write well. In Bala Swamy and Haque’s (2020) study, students became more motivated, active and enthusiastic. The post-test scores of the students in the experimental group showed a great improvement in their writing. A study based on the improvement of creative writing [4], due to the process of blended learning, the gap between individual work and group work in the anytime, anywhere alternating learning style is resolved and the learners are able to create their own writing work at their preferred time and place. This learning style provides learners to manage problems synchronously and asynchronously and work together (Siemens et al., 2015). There was a significant improvement in the students’ English creative writing skills. The higher mean scores on the post-test than on the pre-test reflect the higher quality of creative thinking in writing.

Participants in the study listed learning flexibility as an item that they felt would be improved [4]. Based on this study, the improvement in the flexibility of the learning environment is reflected in the opportunities given to the learners to learn by choosing a space that matches the students’ habits and learning time. Ebron’s (2021) study showed that students’ flexibility in learning was greatly improved. Students were able to take control of their own learning, i.e. asynchronous learning can help to overcome the problem of short attention spans and promote better understanding and retention of material. Students were able to learn different examples and read sample texts over and over again, and they gained a greater understanding of different text-writing conventions. The use of technology in this feature also provides students with the learning convenience of accessing lecture videos through their devices. It frees them from carrying heavy books and other learning materials. Moreover, this feature made the students’ time at home more meaningful and productive. Instead of spending unnecessary time on different social media platforms, they watch instructional videos and learn new things.

A study [9] showed that another improvement shared by the students was the enhancement of their critical thinking skills. The students learned to work and think beyond what the teacher provided; therefore, it made them think critically in their activities. There are four studies focusing on online collaboration [2, 3, 7, 9]. Two studies focused on academic writing [3, 12]. In the study [12], 49.49% of the students were very confident or confident in their level of
academic writing after blended learning. Five studies have addressed progress in emotional aspects [1, 2, 7, 9, 12]. The main focus was on students’ increased self-confidence, reduced learning anxiety, a change in their attitudes towards writing in English (more proactive) and increased willingness to communicate. Progress in these areas can also help students improve their English writing skills.

**Students’ perceptions of using blended learning in improving English writing skills**
The study under review also explored the various perceptions of university students towards the use of blended learning to improve their English writing skills. These perceptions can be categorised into six main groups: positive perceptions towards blended learning, immediate feedback, autonomy, learning independence, learning space, and writing opportunities.

Most of the studies reported that students had positive attitudes towards the use of blended learning to improve their English writing skills or believed that they had positive blended learning experiences in the classroom [1-6, 9, 12]. In general, students reported that using blended learning for English learning was an enjoyable and positive course experience.

It was observed from Lee’s research [1] that the participants perceived the blended learning model to be useful and helpful for the improvement of their writing skills. In Stouck’s (2019) study, students noted that blended learning was effective, mainly in terms of the blended learning process in which they used effective learning tools they used in the blended learning process, such as content received in class, online writing exercises (in this case assignments on Dropbox), lectures, in-class writing exercises, group discussions, textbooks, and online class notes.

Students reported that timely feedback from student-to-student and student-to-instructor online interactions enhanced their learning by helping them share experiences, collaborate, and enhance their critical writing thinking. Meanwhile, teacher-student collaboration and reciprocal assessment enabled students to confidently communicate their ideas to enhance classroom effectiveness. Ebron’s (2021) study pointed out that teachers’ constant provision of immediate feedback on students’ output brought various benefits to students. Students reported that the written feedback provided by teachers on their compositions helped them to identify areas of their writing that needed improvement. Specific written feedback from teachers served as a guide to improve their essays. In addition, students commented that the teacher’s written feedback motivated them to produce better output. They explained that the immediacy and centrality of feedback on tasks was an important factor in their motivation.

Secondary school students were also eager to adopt this method of teaching writing in the future [13]. Most of the students appreciated the teacher’s continuous instruction because the teacher provided them with additional materials after class, giving them more opportunities to learn. Students also reported that flexibility in learning provided them with the opportunity to control their own learning. They watched the lecture videos as long as they liked, rewinding or pausing them when necessary until they gained a better understanding of the lesson.

**The challenges students faced in using blended learning in English writing courses**
Challenges encountered by students in blended learning of English writing were specified in six studies. Firstly in terms of structural completeness of writing, many learners did improve in terms of vocabulary building as well as sentence making, but it is still not an easy task for them to write fully structured essays. While learners’ writing fluency and grammatical complexity improved, the blended course did not seem to promote students’ progress in vocabulary.
complexity and accuracy [14]. Technical problems were also one of the most common problems. The researchers found that the very process of integrating advanced technology into teaching and learning poses challenges for both teachers and students and requires a transition period. It is also easy for students to be distracted by the variety of platforms or some software in the blended learning process and not be able to concentrate on their studies. Students’ self-discipline is also challenged by blended learning tasks and assignments, especially those that need to be completed on the platform or software.

Discussion
Writing is a much-needed skill in today’s culture, and thanks to the proliferation of the Internet and personal computers, as well as advances in technology, there are now many tools, resources and platforms available to support writers. As a result, improving writing skills has become easier. The 15 studies mentioned above between 2013-2023 validated, to varying degrees, the effectiveness of using various technology platforms in blended writing instruction. As measured by the comparison of pre- and post-experiment test result data, students showed varying degrees of improvement in their writing output [6-11, 13], including vocabulary, grammar, and coherence, although there were certainly some difficulties and challenges [2, 4, 9, 15]. In addition, in the interview section of most studies, many respondents indicated that through the use of technology, platforms, etc. in their courses, learners perceived that adequate communication and engagement with teachers and peers played a significant positive role in enhancing their confidence and motivation in learning. Therefore, there are online groups and communities dedicated to discussing writing that can be incorporated into blended writing instruction to provide learners with advice and opportunities to interact, thereby enhancing their writing talents.

The above studies have shown that blended learning improves students’ English writing skills in the following areas: writing output, creative writing, learning flexibility, critical thinking, online collaboration, academic writing, and affect. In terms of writing output, students were able to write more content and even some studies proved that the fluency and grammatical complexity of students’ language expressions were improved. Using apps as an effective platform for improving writing and vocabulary also helps students improve their writing output, creative writing, and academic writing. In blended learning, where students can collaborate a great deal online, teachers can encourage students to engage in learning and collaboration by providing a technology platform for assignments and discussions in blended learning. This allows even shy students to interact and reduces their anxiety. Student engagement in the classroom can also be increased [2, 9, 13, 14]. Students show positive attitudes towards blended courses [1, 2, 7, 9, 12-14], they perceive the teacher as a facilitator, and they find the courses effective, relevant to their learning, and interesting. In terms of affect, the study found that learners with lower levels of proficiency were more in need of help from the instructor. This result has implications for English language teaching. English teachers need to keep up with the new technologies and applications, and constantly improve their awareness and ability to use them, technology among college students. In the future syllabus, students should be given more opportunities to express and get help from teachers.

Most of the studies reported that students had positive attitudes towards using blended learning to improve their English writing skills. Students believe that blended learning provides enough writing opportunities and environments for students to interact and communicate with their classmates and teachers regardless of time and place, and it combines the advantages of online and face-to-face instruction.
The challenges students face in blended learning mainly stem from writing skills, technology use, distraction, and self-discipline issues. The results of vocabulary complexity can reflect the impact of different writing topics on students’ writing performance. When faced with academic writing topics, however, students tend to use more complex vocabulary to express their ideas. But students did not actually write every sentence correctly. But as more sentences are generated, the more mistakes they make, and generalizing more ideas gives them more opportunities to make mistakes. On top of that, producing well-structured essays is just a bigger challenge for them. The very process of integrating advanced technology into teaching and learning poses challenges for both teachers and students and requires a transition period. In this process, teachers must be patient and guide their students to embrace new teaching methods that differentiate blended learning from their personal lives and learning. It can be more practice intensive and requires more thorough learning preparation on the part of both teachers and students. In addition teachers should improve classroom management, both online and offline, which will help students to focus, complete tasks and assignments on time and avoid prolonged distractions.

**Strength and Limitations**
This is one of the few systematic reviews on the use of blended learning to improve college students’ English writing skills. One of the strengths of this review is the organised and comprehensive search of existing literature, including academic databases. In addition, the systematic review focused on specific areas such as the types of blended learning techniques used, the improvement of students’ writing skills, students’ perceptions and challenges encountered. Considering the heterogeneity of the studies due to differences in outcome measures, study designs, sample sizes, nationalities and contexts, as well as differences in the criteria used to assess students’ English writing competence, narrative summaries, rather than meta-analyses, were conducted to highlight the heterogeneity of the studies.

The limitations of this study are mainly in the following areas: firstly, the heterogeneity of the research design. Studies on improving English writing proficiency through blended learning can vary widely in terms of methodology, participant characteristics, and instruments. This heterogeneity can make it challenging to compare and synthesise the results of different studies. Secondly, there are time constraints. The field of blended learning is evolving rapidly, and newer techniques and methods may appear only after the literature review is completed. This may result in the exclusion of recent advances, limiting the applicability of the findings to current educational practice. Finally, there is a lack of longitudinal studies. Many studies on blended learning may be relatively short-term, and long-term effects of such interventions may not be adequately explored.

**Recommendations for Future Research**
Between 2013-2023, there have been relatively few studies exploring the use of blended learning in English writing courses for university students. More comprehensive and rigorous research designs are needed. Aside from that, more comparison groups need to be included in future studies and the sample sizes of the extant studies varied, and larger sample sizes will be needed in the future before it can be concluded with certainty that the use of blended learning is statistically significant in improving college students’ English writing skills.

It is worth drawing attention to the fact that the guided learning theories or strategies used in incorporating blended learning into English writing courses for college students have rarely
been reported in research. However, it is necessary to understand and highlight some of the learning theories or strategies in order to assess and ensure their effectiveness with the target course.

Furthermore, with the rapid development of technology today, there is a need to research and innovate new technologies to keep various platforms or apps updated for integration into English writing courses for college students. It is also interesting to note that along with new technologies, new modes of learning need to be implemented with the help of a guideline (for a specific course or group of people). Future researchers may need to consider using blended instruction to teach speaking, listening, and reading in addition to writing to a wider range of learners and at different language levels. More broadly, the use of other social media applications to teach different English skills and sub-skills also needs to be investigated further.

Conclusion
This systematic review provides information about the use of blended learning to improve English writing skills. These studies provide an overview of the use of blended learning in English writing courses and examine its effectiveness in improving English writing skills, students’ perceptions, and challenges encountered in the learning process. The comprehensive information gained from these studies will help to improve and develop existing technologies and teaching models used to improve English writing skills in the future. In the era of rapid technological development, blended learning provides interactivity, convenience, and flexibility for English learning, which is a great advantage over traditional teaching models. On the other hand, it is also superior to a completely online mode of teaching because it preserves the opportunity for face-to-face interaction with the teacher. In addition, blended learning offers the possibility of continuing learning in a few unexpected situations in society, such as the situation during the Covid-19 period in the previous years when students could not always be in school, in which students still have access to rich learning resources, ample opportunities for practice and timely feedback. Literature points out that students then in the past English writing learning lacked adequate practice opportunities, timely feedback on essay writing and communication with teachers, as well as lack of confidence and motivation to learn because of the boring and difficult course sessions. Therefore, the researcher believes that the application of blended learning to English writing courses given to university students can largely reduce these problems, thus giving play to the point of blended learning and improving students’ English writing skills.
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