Student Teams-Achievement Divisions (STAD) to Develop Academic Writing Skills of EFL University Students

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Abstract

The current research investigated the impact of student teams-achievement divisions (STAD) strategy in developing academic writing skills of EFL university students. The research followed a quasi-experimental one-group design. Thirty seven (37) first-year EFL students at the Faculty of Education, Suez University participated during the first semester of 2024/2025. To assess the participants' academic writing skills before and after the STAD intervention, an academic writing skills pre-post academic writing test was developed by the researcher. At the outset of the research, the participants completed the pretest. Subsequently, they received STAD-based instruction for approximately two months, after which the posttest was administered. The findings of a paired samples t-test indicated a statistically significant improvement in participants' academic writing skills, with posttest scores being significantly higher than pretest scores ($t = 21.78$, $p < 0.01$). These results demonstrate the positive impact of the STAD strategy on developing the academic writing skills of EFL students. Based on these findings, it is recommended that STAD strategy should be used as an effective teaching strategy in EFL academic writing courses at the university level.

Keywords: STAD strategy, academic writing skills.

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فرق الإنجاز الطلابية (STAD) لتنمية مهارات الكتابة الأكاديمية لدى طلاب اللغة الإنجليزية بالمرحلة الجامعية

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المستخلص

سعى البحث الحالي إلى دراسة أثر استراتيجية "الفرق الطلابية وتقسيمات التحصيل (STAD)" في تنمية مهارات الكتابة الأكاديمية لدى طلاب اللغة الإنجليزية كلغة أجنبية (EFL) في المرحلة الجامعية. اتبع البحث المنهج شبه التجريبي بتصميم المجموعة الواحدة. وقد شارك في الدراسة سبعة وثلاثون (37) طالبًا من طلاب الفرقة الأولى بقسم اللغة الإنجليزية بكلية التربية – جامعة السويس، خلال الفصل الدراسي الأول من العام الأكاديمي 2025/2024. ولقياس مهارات الكتابة الأكاديمية لدى المشاركين قبل وبعد تطبيق الاستراتيجية، قامت الباحثة بإعداد اختبار قبلي–بعدي لمهارات الكتابة الأكاديمية. في بداية البحث، خضع المشاركون للاختبار القبلي، ثم تلقوا تعليمًا قائمًا على استراتيجية STAD لمدة تقارب الشهرين، أعقبها تطبيق الاختبار البعدي. أظهرت نتائج اختبار "ت" للعينات المرتبطة وجود فروق ذات دلالة إحصائية بين متوسطي درجات الطلاب في الاختبارين، حيث جاءت درجات الاختبار البعدي أعلى بشكل ملحوظ من درجات الاختبار القبلي. (t = 21.78, p < 0.01) وتدل هذه النتائج على الأثر الإيجابي لاستراتيجية STAD في تنمية مهارات الكتابة الأكاديمية لدى طلاب EFL. وبناءً على هذه النتائج، يوصى باستخدام استراتيجية STAD كاستراتيجية تدريسية فعالة في تدريس الكتابة الأكاديمية لطلاب اللغة الإنجليزية في المرحلة الجامعية.

الكلمات المفتاحية: استراتيجية STAD ، مهارات الكتابة الأكاديمية.

Student Teams-Achievement Divisions (STAD) to Develop Academic Writing Skills of EFL University Students

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Review of Related Literature

Academic writing is not just a technical skill, but a way of thinking and communicating that plays a key role in how knowledge is created and shared in universities (Sulaiman, 2022). It goes beyond simply following rules—it reflects how writers see themselves within their fields, how they connect with ways of thinking in their discipline, and how they understand and follow the often-unstated expectations of academic communities (Kozak, 2022). Through writing, individuals take part in academic conversations and express their ideas and positions. Recently, researchers have raised concerns about traditional methods of teaching academic writing, arguing that strict rule-based approaches ignore the complex relationships between language, personal identity, and power. As a result, there has been a shift toward teaching methods that focus more on the writing process, specific types of writing (genres), and the context in which writing happens. These newer approaches see academic writing as a flexible and evolving activity that is shaped by the writer's purpose, audience, and the academic environment (Rasulova & Ataullayeva, 2024).

Academic writing constitutes a cornerstone of higher education, empowering students and scholars to articulate complex ideas with clarity, construct coherent and evidence-based arguments, and actively participate in academic discourse (Grami, 2010). It functions as a formalized mode of communication through which individuals convey nuanced perspectives across a range of subjects (Oshima & Hogue, 2007; El-Dioury, 2008). Marked by its structured organization, objective tone, and adherence to scholarly conventions, academic writing demands linguistic precision and intellectual rigor. As Strongman (2014) underscores, the strategic selection of language is essential for effectively transmitting sophisticated concepts to an academic audience. Furthermore, the integration of credible sources and logical progression of ideas highlighted by Nazario et al. (2010) enhances the reliability and coherence of scholarly texts. Mastery of academic writing is therefore indispensable for academic success, as it not only facilitates the

persuasive presentation of research findings but also cultivates critical thinking and elevates scholarly engagement.

Academic writing also holds a central role in higher education as it serves as the primary medium through which knowledge is constructed, communicated, and evaluated (Nasr, 1999; Khalil & Al Smadi, 2008; Khsawnah, 2008; Shields, 2010; Candin, 2016; Qonsowah, 2020). Its importance extends beyond the production of texts to encompass the development of critical thinking, analytical reasoning, and the ability to engage with scholarly discourse. To achieve these outcomes, academic writing follows a structured process that begins with pre-writing, where writers generate ideas and explore existing literature to ground their arguments. This is followed by the drafting stage, which focuses on organizing ideas into a logical framework. Revision and editing then refine the text's coherence, clarity, and academic tone. The finalizing phase ensures the work aligns with formal academic standards before submission. By adhering to this rigorous process, academic writing not only enhances the quality of students' work but also cultivates the intellectual discipline essential for academic and professional advancement.

Academic writing is characterized by objectivity, clarity, coherence, and evidence-based reasoning, all of which contribute to its rigor and credibility (Bak, 2003). It requires a logically structured presentation of ideas, supported by reliable sources to enhance the validity of arguments (Chin et al., 2012). Objectivity is a fundamental principle, as academic writing avoids personal opinions unless explicitly required (Sheehy, 2019). Additionally, clarity and precision are essential in ensuring readability by employing unambiguous language (Al Hoshani & Al Nasian, 2020). Coherence and organization further enhance the effectiveness of academic discourse by maintaining a logical flow between ideas (Abd Elwahab, 2020). Moreover, proper citation is crucial not only for strengthening arguments but also for maintaining academic integrity and preventing plagiarism (Zeep, 2021). These interconnected elements collectively establish the foundation of scholarly writing, ensuring its reliability and effectiveness in knowledge dissemination.

Academic writing serves multiple objectives that are essential for both students and educators. As highlighted by Al Ahwal (2015), it is a fundamental skill that aims to enhance students' cognitive abilities, including summarization, critical analysis, paraphrasing, and structured articulation of ideas using credible sources. Furthermore, academic

writing provides educators with an effective means to assess students' linguistic proficiency by evaluating their grammatical accuracy, vocabulary use, and ability to generate and organize ideas coherently. Bailey (2015) emphasized that academic writing's aim extends beyond linguistic competence, as it involves examining real-world issues, analyzing them from different perspectives, and proposing solutions to identified problems. Additionally, it allows students to engage with prior research through comprehensive reports that summarize and critique existing studies. Mekhnane (2016) further indicated that one of the most significant objectives of academic writing is fostering meaningful academic discussions between instructors and students, facilitating knowledge construction and experiential learning. Moreover, developing critical thinking skills, requiring students to analyze complex ideas, evaluate multiple viewpoints, and construct well-reasoned arguments. Through engagement with academic writing, students refine their ability to process information critically and contribute effectively to scholarly discourse.

Context of the Problem

Despite its fundamental role in fostering critical thinking, knowledge dissemination, and scholarly communication, academic writing remains comparatively undervalued in many educational contexts. This lack of emphasis is particularly evident among EFL students, as demonstrated by the researcher's observation into the academic writing challenges faced by students at the Faculty of Education, Suez University. Drawing on professional observations, a pilot research, an academic writing assessment questionnaire, and previous studies, the researcher identified significant deficiencies in key writing competencies. While students exhibited some proficiency in identifying main ideas and understanding vocabulary, they struggled with essential academic writing skills, including paraphrasing, grammatical accuracy, textual organization, and maintaining coherence. These persistent challenges highlight the pressing need for targeted pedagogical interventions to systematically develop students' academic writing proficiency and equip them with the necessary skills for effective scholarly communication.

To substantiate these findings, the researcher conducted a pilot study, administering an academic writing test to 23 first-year EFL students, which revealed considerable weaknesses across academic writing skills. The results indicated that 61% of participants scored below 50%, with only 35% achieving moderate scores, reflecting difficulties in structuring arguments, employing formal language, ensuring grammatical precision, and maintaining textual coherence. Furthermore, insights from an

academic writing assessment checklist, distributed among TEFL and linguistics jury, corroborated these findings, highlighting persistent deficiencies in coherence, organization, paraphrasing, and linguistic accuracy. Collectively, these results emphasize the pressing need for a structured, research-informed approach to academic writing instruction that systematically addresses these gaps and fosters more effective scholarly writing practices among EFL students.

A number of studies have addressed the persistent challenges EFL students face in academic writing, proposing various instructional strategies to enhance their skills. Researchers such as Al-Ahwal (2015), Hilali (2019), Ahmad (2020), and Abdelwahab (2020) highlighted common weaknesses among undergraduate and postgraduate students and explored approaches like targeted programs, Web Quest, virtual research teams, and metadiscourse to overcome these issues. These efforts align with broader recommendations advocating for structured, cooperative learning methods. Studies by Hilali (2019) and Yasunaga (2023), in particular, emphasized the effectiveness of group-based and team-learning strategies in developing academic writing skills, reinforcing the value of collaborative instructional approaches in EFL contexts.

Statement of the Problem

The problem of the current research is stated in the continued struggle of EFL university students to acquire and demonstrate adequate academic writing skills; despite the critical role such skills play in their academic progression. Traditional instructional strategies often lack the interactive, supportive, and structured features necessary for effectively developing these competencies. In light of this, the research seeks to investigate the extent to which Student Teams-Achievement Divisions (STAD) strategy can serve as an effective intervention to enhance academic writing skills among first-year EFL students within a cooperative learning framework.

Student Teams-Achievement Divisions (STAD)

Student Teams-Achievement Divisions (STAD) strategy represents one of the most prominent and extensively researched models within the cooperative learning framework. STAD grounded in social constructivist theory, emphasizes the role of peer interaction, cooperative learning, and shared responsibility in fostering meaningful educational experiences (Sufanti et al., 2021). As a student-centered strategy, it encourages students to actively engage with academic content through teamwork,

discussion, and mutual support, thereby enhancing not only their cognitive development but also their social and interpersonal skills (Guterres, 2024). The strategy operates through a structured process that includes teacher presentations, team research sessions, individual assessments, and group recognition based on collective performance. This combination of individual accountability and group success motivates students to contribute effectively to their teams while striving for personal academic improvement. Widely applied across different educational levels and subject areas, STAD has been recognized for its potential to improve academic achievement, boost motivation, and create a more inclusive and engaging classroom environment (Madang & Ong, 2023).

Student Teams-Achievement Divisions (STAD), introduced by Robert Slavin in the 1970s, is a cooperative learning strategy designed to foster interactive and student-centered learning by prioritizing peer cooperation over independent research. Extensively implemented across diverse educational settings, STAD has been shown to enhance student motivation, engagement, and overall academic achievement. STAD is grounded in social constructivism, which posits that learning is a social process facilitated by interaction and cooperation (Al-Odwan & Dawood, 2016). Vygotsky's theory highlighted the importance of language, social interaction, and the Zone of Proximal Development (ZPD) in learning. STAD aligns with these principles by promoting peer interaction, cooperative tasks, and immediate feedback, which enhance both cognitive and social skills (Zaretsky, 2021).

According to Ishtiaq et al. (2017), Jamaludin & Mokhtar (2018), and Rahmatika (2019), STAD involves students working in small, heterogeneous teams to achieve shared academic objectives. This approach integrates individual accountability with group cooperation, ensuring that students support one another in mastering course content while also demonstrating their individual proficiency through assessments. By balancing cooperative and competitive elements, STAD not only alleviates the instructional burden on teachers but also cultivates a dynamic and engaging learning environment.

Slavin (2005) outlined five key components of STAD that structure cooperative learning. The Presentation phase involves introducing content and tasks, ensuring students comprehend the strategy. Team Formation promotes peer cooperation by grouping students heterogeneously, enabling high achievers to support their peers. Individual Quizzes assess students' independent understanding, shifting accountability from group work to personal performance. Individual

Scores motivate students to improve while contributing to their team's success. Finally, Team Recognition reinforces achievement through rewards, fostering both cooperation and healthy competition.

STAD, rooted in cooperative learning principles and social constructivist theory, fosters both academic and interpersonal development. Individual accountability ensures that each student contributes to their team's success while taking ownership of their learning (Wahyuningsih, 2017). The strategy balances cooperative engagement with independent assessment, enabling students to first engage in peer-supported discussions before demonstrating mastery individually (Boudehane, 2015). Additionally, STAD cultivates interpersonal skills, such as teamwork and leadership, while emphasizing direct peer interaction to enhance problem-solving and social cohesion (Budiyono & Ngumarno, 2019). Furthermore, immediate feedback and team recognition serve as motivational drivers, reinforcing student effort and fostering a sense of collective achievement (Purnomo et al., 2019).

The intervention of STAD ensures an optimal balance between cooperation and individual responsibility. It begins with the formation of heterogeneous teams, promoting peer-assisted learning (Deswarni, 2018; Murdani et al., 2019). Explicit instructional guidance clarifies content and objectives, followed by cooperative tasks that facilitate peer-led discussions and problem-solving. Students then undergo individual assessments to validate comprehension, reinforcing personal accountability. Finally, team recognition mechanisms acknowledge high-performing groups, fostering motivation and a competitive yet cooperative learning environment. This systematic approach ensures STAD's effectiveness in enhancing both academic performance and essential cooperative skills.

Slavin (1995) highlights the dual benefits of the STAD strategy, both cognitively and motivationally. Cognitively; peer interaction enhances comprehension and mastery of content, while motivationally; the strategy fosters a competitive yet cooperative environment where rewards and encouragement drive academic achievement. Similarly, Abo Harb et al. (2004) and Alseif (2018) emphasize STAD's role in overcoming various educational challenges, including reducing individual learning anxiety, promoting teamwork, and fostering a sense of classroom community. They also mentioned that STAD strategy enhances retention and understanding by integrating group discussions with individual assessments and supports differentiated instruction by

accommodating students with diverse abilities and learning styles. Compton et al. (2016), Jamaludin and Mokhtar (2018), Barokah (2020), and Khidr et al. (2022) further illustrated that STAD enhances communication, knowledge-sharing, and cooperation, thereby equipping students with vital teamwork and leadership skills. Furthermore, the strategy increases students' motivation by fostering a balance between competition and cooperation, encouraging students to take responsibility for their learning and contribute to their team's success. While STAD provides a structured and supportive environment that enhances both academic and interpersonal development, Murdani et al. (2019) and Barokah (2020) acknowledged potential challenges, such as the time-intensive nature of intervention, students' over-reliance on peers, and increased classroom noise due to high levels of interaction. Despite these challenges, the numerous advantages of STAD highlight its effectiveness in promoting student engagement, achievement, and cooperative learning.

Prior research highlighted that STAD is a highly effective strategy in enhancing various academic skills. Wiraningsih and Budi (2016) investigated STAD's influence on high school students' interaction and discussion levels, revealing that the strategy fostered active discussions, increased engagement, and reduced student boredom. Similarly, Aryani (2016) examined STAD's role in improving learning processes among undergraduate students, demonstrating its effectiveness in enhancing motivation, teamwork, and critical thinking skills. In higher education, Jamaludin and Mokhtar (2018) assessed STAD's impact on student achievement, reporting improved performance and enthusiasm due to its emphasis on interaction and cooperative learning. Likewise, Aliyu (2019) explored STAD's effectiveness in secondary education, specifically in learning three-dimensional (3D) shapes, concluding that students achieved better results through STAD compared to traditional teaching methods, benefiting from both cooperative and individual learning components. Further supporting these findings, Udit and Hashim (2020) analyzed STAD's impact on university students in Malaysia, confirming its role in enhancing cooperation, problem-solving skills, and subject retention. Collectively, these studies underscore STAD's efficacy in fostering active learning, improving academic performance, and promoting essential cognitive and social skills.

Question of the Research

To tackle academic writing challenges mentioned above, the current research examined the impact of Student Teams-Achievement Divisions (STAD) strategy in developing academic writing proficiency among 1st

EFL university students. Therefore, this research aimed to bridge this gap by addressing the following question:

- **How does the intervention of the STAD strategy contribute to the development of academic writing skills among EFL university students?**

Hypothesis of the Research

Based on the previous question, the research supposed the following hypothesis:

- **There would be a statistically significant difference in the participants' mean scores between the pretest and the posttest of academic writing skills.**

This research contributed to the literature on cooperative learning strategies by examining the impact of the STAD method on EFL students' academic writing skills. The findings suggest that STAD can be integrated into university writing courses, particularly for first-year EFL students, to encourage active participation and skill development. Educators can effectively use STAD to promote student engagement, teamwork, and monitor writing progress. The program led to improvements in students' writing abilities, motivation, and self-confidence, which are crucial for academic success. The study also highlighted STAD's potential for enhancing language instruction and offered directions for future research on its applicability in various disciplines. Ultimately, the research emphasized STAD's relevance as a dynamic, student-centered approach to language learning.

Methodology

Research Design

To evaluate the effectiveness of the STAD strategy on academic writing skills, the study adopted a quasi-experimental one-group pretest-posttest design. Students' writing abilities were assessed before and after the intervention to measure progress. This design enabled the researcher to determine the impact of the STAD strategy on enhancing students' academic writing through cooperative, structured learning.

Figure (1)

The Steps of the Research Design
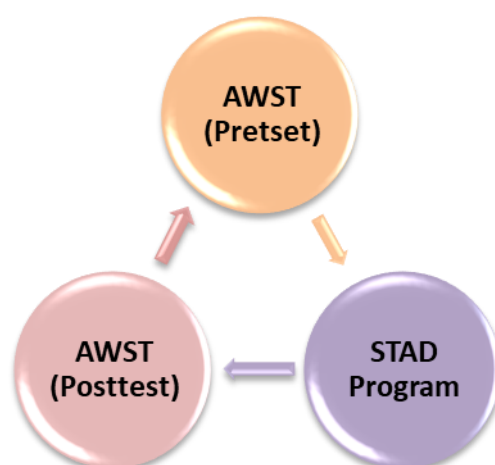
Participants

The research was conducted with a sample of thirty seven (37) 1st year EFL students from the Faculty of Education at Suez University, who were chosen based on their enrollment in a writing course during the first semester of the 2024-2025 academic year. The decision to focus on first-year EFL students was grounded in the recognition that these students, as novice writers, are encountering academic writing as a distinct and formal subject for the first time. Prior to this, their engagement with academic writing had been limited to its integration within a broader English language curriculum. Given this context, first-year students are at a crucial stage where they must develop a solid foundation in the fundamental principles of precise, coherent, and fluent academic writing. This early-stage development is essential, as it will enable them to acquire the skills for mastering various academic writing forms in their subsequent studies. The researcher selected this cohort to target the specific challenges faced by novice academic writers and to address the importance of establishing strong academic writing skills early in their academic careers.

Instruments

Academic Writing Skills Checklist

The researcher developed a checklist comprising 17 sub-skills of academic writing, categorized into linguistic skills, organizational skills, and content-related skills. To ensure its validity and relevance, the questionnaire was reviewed by a panel of 14 jury members, including TEFL and linguistics professors from various faculties across multiple universities in Egypt. The primary objective of the checklist was to identify and determine the most essential academic writing skills needed

by EFL students to enhance their academic writing proficiency. The final form of the questionnaire included the following skills:

1. Use simple, formal language.
2. Employ appropriate syntactic connections between sentences.
3. Maintain objectivity by using the third-person point of view.
4. Ensure accurate spelling and punctuation.
5. Structure texts with an introduction, body, and conclusion.
6. Apply formal grammatical structures.
7. Develop clear thesis statements.
8. Support thesis statements with relevant ideas.
9. Maintain coherence.
10.   Paraphrase information accurately.

To ensure the validity and suitability of the checklist for the current research, it was reviewed by a jury of 14 linguistics and Teaching English as Foreign Language (TEFL) faculty members. The main objective of the checklist was to identify the most important academic writing skills that should be taught to first-year EFL students, who are beginning to learn academic writing as a separate subject. The jury was asked to examine whether the checklist accurately reflected the basic writing skills that these students need to develop at this early stage. They were also requested to provide suggestions for any other important academic writing skills they believed should be added. This review process helped improve the checklist to make sure it was complete, appropriate for the students' level, and useful for guiding the teaching and assessment of academic writing.

Academic Writing Skills Preposttest (AWST)

The Academic Writing Skills Preposttest (AWST) was designed with the aim of evaluating the academic writing skills of first-year EFL students before and after the intervention of STAD strategy. The primary objective of the test was to verify the research hypothesis, which posited a statistically significant difference between students' academic writing performance in the pre-test and post-test, favoring the latter. The academic writing skills preposttest (AWST) consisted of 19 carefully structured questions which are systematically designed by the researcher and distributed across the previously identified academic writing skills. The test incorporated a combination of essay writing and multiple-choice questions (MCQs) to measure both productive and analytical academic writing abilities. The first question, an essay task, was particularly significant as it assessed all the targeted academic writing skills. This

essay enabled an in-depth evaluation of students' ability to construct coherent arguments, organize ideas logically, and maintain academic tone and structure. To ensure fair and standardized scoring, a detailed academic writing rubric had been developed to objectively assess essay responses based on predefined criteria. The remaining 18 questions were strategically allocated across the academic writing skills where each skill is assessed through two distinct questions.

The total score of the test was 50 marks. The essay question constituted 25 marks, with 2.5 marks assigned to each of the ten assessed academic writing skills. The two paraphrasing questions were allotted a total of 5 marks. Each multiple-choice question carried 1 mark, while the reading passage section included two questions, each worth 2 marks, contributing a total of 4 marks. This structured distribution resulted in a total score of 50 marks, ensuring a fair and comprehensive assessment of students' academic writing abilities.

To establish the validity of the AWST, the research employed multiple validation measures, including Content Validity, to confirm the test's alignment with the specified academic writing skills; and Construct Validity, to determine whether the test accurately reflected the theoretical framework underlying academic writing proficiency assessment. This validation ensured that the AWST was a reliable and effective instrument for measuring the impact of the STADP on participants' academic writing skills.

Content Validity. Content validity ensures that the test items comprehensively reflect the learning objectives and the academic writing curriculum. To establish the content validity of the Academic Writing Skills Preposttest (AWST), the researcher designed test questions that encompassed all essential academic writing skills identified by TEFL and linguistics jury. These skills included formal language usage, grammatical accuracy and other fundamental components critical for academic writing proficiency. By aligning the test content with the jury's recommendations, the researcher ensured that the AWST provided a thorough and representative assessment of the participants' academic writing competencies.

Construct Validity. Construct validity pertains to the extent to which the test accurately measures the intended academic writing skills. To validate the construct of the AWST, the researcher administered the test to pilot participants of 33 students out of the sample of the research. This process allowed for an evaluation of whether the test effectively assessed

the targeted academic writing skills and provided meaningful insights into participants' academic writing abilities. The results are presented in the following table:

Table 1

Correlation Coefficients between the Overall Test score and the Total Score for each Skill

Skill		Pearson Correlation Sig. (2-tailed)
Skill 1	Formal language	,80**
Skill 2	Connections	,59**
Skill 3	Third person (Objectivity)	,79**
Skill 4	Spelling	,67**
Skill 5	Paragraph form	,79**
Skill 6	Structures	,67**
Skill 7	Thesis statement	,56**
Skill 8	Supporting ideas	,49**
Skill 9	Coherence	,59**
Skill 10	Paraphrase	,62**

Note. Correlation is significant at the 0.01 level (2-tailed).

Table (1) presented the correlation coefficients between the overall test score and the total score of each academic writing skill, demonstrating the extent to which performance in each individual skill contributed to overall academic writing proficiency. The analysis was conducted using Pearson's correlation coefficient (a statistical measure that quantifies the strength and direction of the relationship between two variables). The results indicated that all correlations were statistically significant at the 0.01 level (2-tailed), confirming a meaningful connection between students' proficiency in specific academic writing skills and their overall test performance.

The findings indicate a strong positive correlation for Skill 1 (r = 0.80**) and Skill 3 (r = 0.79**), suggesting that students who performed well in these skills also tended to achieve higher overall test scores. Similarly, Skill 5 (r = 0.79**) demonstrated a strong correlation, further supporting its contribution to students' overall writing proficiency. Moderate correlations were observed for Skill 4 (r = 0.67**) and Skill 6 (r = 0.67**), implying a consistent but slightly weaker association with the total test score compared to the higher-scoring skills. Skill 2 (r = 0.59**) and Skill 9 (r = 0.59**) also displayed moderate correlations, indicating their role in overall performance while suggesting room for improvement

in their mastery. Weaker correlations were noted for Skill 7 (r = 0.56**) and Skill 8 (r = 0.49**), which may suggest that these skills contributed less significantly to the overall test performance or that students demonstrated more variability in mastering them. Overall, the correlation analysis confirms that all assessed academic writing skills are positively related to the total test score, validating the test's ability to measure students' academic writing proficiency effectively.

Reliability of the AWST

Test reliability is a fundamental characteristic of any assessment tool, ensuring its consistency, stability, and accuracy in measuring the intended constructs. A reliable test consistently produces similar results when administered to the same group under comparable conditions, minimizing the impact of random errors or fluctuations (Cohen et al., 2018). Establishing the reliability of a test is crucial to guarantee that its scores accurately reflect the participants' abilities rather than external influences such as test conditions or scorer variability.

Piloting the Test

To ensure the reliability of the Academic Writing Skills Test (AWST), the researcher conducted a pilot study. This study involved administering the AWST to 33 students out of the participants of the study. These participants were selected to allow the researcher to gather data on how the test performed before it was used in the actual research. The primary objective of this pilot testing was to evaluate the internal consistency of the test, ensuring that all items in the test accurately measure academic writing skills.

To assess the reliability, the researcher applied Cronbach's Alpha coefficient, a widely accepted statistical method for measuring the internal consistency of a set of items within a test. This coefficient helps determine how well the individual items on the test correlate with each other, providing insight into whether the test measures what it intends to measure. The pilot test involved 19 items on the AWST, and the resulting Cronbach's Alpha value was 0.799, which indicates a high level of internal consistency. This value suggests that the test is reliable and the items on the AWST work well together to assess the academic writing skills of students. These results were crucial in confirming the test's reliability before being administered to the main participants.

Table 2

Reliability of Academic Writing Test

Cronbach's Alpha	N of Items
.799	19

Table 2 illustrated the AWST achieved a Cronbach's Alpha coefficient of 0.799, indicating a high level of internal consistency among the test items. According to statistical benchmarks, a Cronbach's Alpha value above 0.70 is generally considered acceptable, while values approaching 0.80 or higher suggest strong reliability. This result confirmed that the AWST effectively measured academic writing skills in a consistent and dependable manner. The obtained reliability coefficient demonstrated that the test items are well-aligned and measured the intended academic writing skills with a high degree of consistency. This ensured that any variations in participants' scores were likely due to actual differences in their writing abilities rather than inconsistencies in the test structure or administration. Consequently, the AWST can be regarded as a statistically reliable instrument for evaluating first-year EFL students' academic writing proficiency before and after the intervention of the STAD program (STADP).

Student Teams Achievement Division (STAD) Intervention

The Academic Writing Skills intervention, grounded in the STAD cooperative learning model, was meticulously crafted to enhance the academic writing skills of first-year EFL students through a structured, cooperative framework. This intervention seamlessly integrated explicit instructional strategies, autonomous learning, peer-assisted activities, and scaffolded support to cultivate a dynamic and inclusive educational environment. By emphasizing cooperative engagement, the intervention aimed not only to develop essential academic writing skills but also to bolster students' confidence in participating in academic discourse. Leveraging STAD-based instructional methodologies, interactive pedagogical tools, and continuous formative feedback, the intervention facilitated the acquisition of both technical writing competencies and higher-order cognitive abilities vital for academic and professional achievement. Its successful intervention at Suez University led to measurable improvements in students' writing proficiency, critical thinking, and self-efficacy in academic communication. By the end of the intervention, students were expected to:

1. Use simple, uncomplicated formal language.
2. Use suitable syntactic connections among sentences.
3. Consider 3rd person point of view (Objectivity).
4. Master accurate vocabulary spelling and using of punctuations.
5. Write the text in paragraph form [introduction, body and conclusion].
6. Use appropriate formal grammatical structures.
7. Identify and write good thesis statements.
8. Identify and write supporting ideas related to thesis statements.
9. Consider coherence.
10. Paraphrase what is quoted in one's own style.

Phases of STAD's Intervention

Pretesting

At the beginning of the 2024–2025 academic year, the researcher meticulously selected a cohort of 37 first-year EFL students from the Faculty of Education, adhering to specific selection criteria to ensure the research's validity and reliability. The criteria for inclusion required that participants have access to Android mobile devices and a stable internet connection, as these technological resources were integral to the instructional approach being implemented. Before engaging with the STAD strategy, all selected participants were required to complete a pretest designed to assess their academic writing skills. This pre-assessment played a crucial role in establishing a baseline measure of their academic writing competencies, enabling the researcher to conduct an objective and systematic analysis of their skill levels prior to the intervention. By obtaining this initial dataset, the research ensured that any subsequent improvements or variations in academic writing performance could be accurately attributed to the intervention rather than extraneous factors.

Intervention of STAD strategy

The intervention began with an orientation session where the researcher introduced the research's framework, objectives, and theoretical foundations through a data show presentation. This session aimed to ensure that students understood the research's goals and approach. Students were then grouped into diverse teams of three to five, taking into account their varying abilities and backgrounds. This grouping strategy promoted cooperative learning while ensuring individual accountability to prevent over-reliance on peers. Each team was assigned a unique name, fostering a sense of identity and encouraging active participation. Each session started with a warm-up activity designed to engage students and introduce the academic writing

skill for the day. The warm-up included various media like texts, videos, images, and thought-provoking questions. Following the warm-up, direct instruction was provided using the STAD approach, which included clear explanations, examples, and modeling of the writing skill. After the instruction, students participated in structured writing tasks divided into two phases. The first phase involved cooperative learning, where students worked together in teams to discuss and cooperate on their writing. The second phase was individual, allowing students to independently apply and refine the skills they had learned. Throughout the intervention, the researcher played a key role in guiding the STAD strategy, providing feedback, and supporting students. To sustain motivation, small rewards were given at the end of each session. Homework assignments were submitted via a dedicated WhatsApp group, enabling continuous monitoring and feedback. This allowed for ongoing student support and skill development. The intervention aimed not only to improve academic writing skills but also to create a cooperative and interactive learning environment. The combination of direct instruction, peer cooperation, individual responsibility, and continuous feedback helped foster active participation and independent learning.

Posttesting

After completing the Student Teams-Achievement Divisions (STAD) intervention, a posttest was administered to all participants to evaluate the development of their academic writing skills and to determine the extent of improvement achieved through the intervention. The STAD program aimed to foster cooperative learning, promote team-based activities, encourage peer support, and ultimately enhance the academic writing skills of the students. The primary purpose of the posttest was to assess how effectively the STAD strategy contributed to the improvement of key academic writing skills among first-year EFL students.

Following the intervention, students' performance was carefully recorded, and their posttest scores were analyzed using the Statistical Package for Social Sciences (SPSS 22). This statistical tool facilitated a detailed comparison of the pretest and posttest results, enabling the researcher to measure the improvements in writing skills. The analysis allowed for the identification of any significant gains in the students' academic writing abilities, which could be attributed to the cooperative and supportive nature of the STAD program. By conducting this

posttest and performing statistical analysis, the researcher was able to provide a thorough evaluation of the intervention's impact on student performance in academic writing.

The following table presents a detailed comparison of the participants' scores on the pretest and posttest of academic writing skills. It provides an analysis of the mean differences in performance for both the total writing score and individual writing skills, such as grammar, coherence, vocabulary use, and overall writing structure. The table includes key statistical information, such as the t-values, degrees of freedom (DF), standard deviations (SD), and significance levels (Sig.), which collectively offer a clear picture of the students' progress. The data reveals that each individual skill showed statistically significant improvements, with p-values consistently below the 0.05 threshold, indicating that the observed changes were not due to chance. Specifically, with a significance value of 0.01 for all comparisons, the results demonstrate that STAD strategy had a profound and measurable impact on students' academic writing skills.

Table 3

The Difference between the Means of Scores of the Participants on the Pretest and the Posttest of Academic Witting Skills

		Mean	SD	T	DF	Sig. (2-tailed)
Total	Pre	17,5	7,69	21,78	36	**0,01**
	Post	38,2	5,90			
Skill 1	Pre	2,1	1,28	-10,79	36	**0,01**
	Post	4,1	,88			
Skill 2	Pre	1,7	,97	-10,95	36	**0,01**
	Post	3,9	1,05			
Skill 3	Pre	2,1	1,55	-12,89	36	**0,01**
	Post	5,4	1,14			
Skill 4	Pre	1,6	1,01	-13,06	36	**0,01**
	Post	4,5	,96			
Skill 5	Pre	1,5	,96	-9,08	36	**0,01**

	Post	2,8	,44			
Skill 6	Pre	1,7	1,19	-8,94	36	**0,01**
	Post	4,1	1,35			
Skill 7	Pre	1,6	,82	-8,60	36	**0,01**
	Post	3,2	,73			
Skill 8	Pre	1,3	,883	-9,77	36	**0,01**
	Post	2,9	,880			
Skill 9	Pre	1,6	1,21	-7,12	36	**0,01**
	Post	3,2	1,12			
Skill 10	Pre	2,2	1,52	-6,45	36	**0.01**
	Post	3,8	1,26			

Note. There is a statistically significant difference in the students' mean scores between the pretest and the posttest of academic writing skills.

The results presented in Table (3) demonstrated a statistically significant improvement in the academic writing skills of first-year EFL students following the intervention of STAD strategy. The total mean score increased from 17.5 in the pretest to 38.2 in the posttest, with a highly significant t-value of 21.78 ($p < 0.01$). Each individual skill also exhibited notable progress, with mean scores nearly doubling across all assessed areas.

The findings provided a clear answer to the research question regarding the impact of STAD strategy in enhancing first-year EFL students' academic writing skills **(How does the intervention of the STAD strategy contribute to the development of academic writing skills among EFL university students?).** The intervention of STAD strategy had shown a significant positive contribution to the development of academic writing skills. The structured nature of STAD which emphasized team learning within diverse groups has facilitated active engagement, peer support, and individual accountability. These components, in turn, fostered an environment conducive to the improvement of writing skills. Additionally, the gradual transition from cooperative writing tasks to individual assignments enabled students to refine their writing abilities while receiving timely feedback. The results

underlined the effectiveness of STAD strategy in promoting critical thinking, coherence, and clarity in academic writing, as evidenced by the measurable improvement in students' academic writing performance.

Table (4) summarized the differences in students' performance on each academic writing skill before and after the program.

Table 4

The Difference between the Mean Scores of the Pre- and Post-test for each Skill

Skill	Posttest mean scores	Pretest mean scores	The deviation	Ranking by highest mean scores
Skill 1 Formal language	4,1	2,1	2	5
Skill 2 Connections	3,9	1,7	2,2	4
Skill 3 Third person	5,4	2,1	3,3	1
Skill 4 Spelling	4,5	1,6	2,9	2
Skill 5 paragraph form	2,8	1,5	1,3	7
Skill 6 Structures	4,1	1,7	2,4	3
Skill 7 thesis statement	3,2	1,6	1,6	6
Skill 8 supporting ideas	2,9	1,3	1,6	6
Skill 9 Coherence	3,2	1,6	1,6	6
Skill 10 Paraphrase	3,8	2,2	1,6	6
Total	38,2	17,5	20,7	-

The statistical analysis in table (4) revealed significant variations in students' progress across academic writing skills following the STAD intervention, influenced by prior knowledge, learning styles, motivation, and cognitive complexity. Students with stronger linguistic foundations showed rapid improvement in rule-based skills such as spelling and grammar, while those with limited exposure to academic writing exhibited slower progress in complex areas like paragraph structuring and cohesion. Learning modalities also played a role, with visual students benefiting from structured frameworks, whereas kinesthetic students faced challenges in composition-heavy tasks. Motivation further shaped outcomes, as students engaged more with skills perceived as

critical for academic success, leading to notable gains in formal language and third-person usage but slower progress in paragraph organization. Additionally, lower-order writing skills improved more significantly due to their reliance on clear linguistic rules, whereas higher-order skills requiring abstract reasoning showed more gradual advancement. Interestingly, despite its foundational nature, essay structuring demonstrated modest improvement, likely due to students prioritizing more challenging competencies within the STAD framework. Overall, the findings confirm a statistically significant enhancement in students' academic writing, underscoring the STAD intervention's effectiveness. These insights highlight the importance of addressing student differences, motivation, and cognitive demands in instructional design. The following chapter will discuss conclusions, pedagogical implications, and future research directions.

Results of the Research

The following points summarized the statistical analysis of the impact of the STAD-based intervention on EFL students' academic writing skills. The analysis provided strong evidence of the effectiveness of STAD strategy in improving various academic writing skills, as reflected in statistical measures such as p-values, t-values, mean scores, and standard deviations. These results indicated significant improvements in students' academic writing proficiency across multiple skills, reinforcing the efficacy of STAD program in fostering academic writing development. The statistical findings suggested not only overall progress but also highlighted specific areas where students showed notable growth, shedding light on the impact of cooperative learning on enhancing academic writing skills.

Statistical Significance (p = 0.01)

The p-value (probability value) (0.01) across all comparisons confirms that the differences between pretest and posttest scores are statistically significant at a 99% confidence level. This indicated that the improvements observed in students' academic writing skills are highly unlikely to be due to chance, providing strong empirical evidence of the effectiveness of the STAD-based intervention in enhancing their academic writing proficiency.

T-Values

The negative and large T-values across all skills reflected a substantial improvement in EFL students' posttest scores. Since a negative T-value signifies that the posttest mean is higher than the pretest mean, this confirms that students achieved significant progress after the intervention. Skills such as Paraphrasing (t = -13.06) and Coherence (t = -12.89) recorded the highest improvement, highlighting the program's effectiveness in strengthening students' ability to restructure and organize their writing.

Mean Scores

The mean scores in the posttest significantly exceeded those in the pretest, indicating a notable enhancement in academic writing skills. For instance, Skill 1 (Formal Language) improved from 2.1 to 4.1, while Skill 3 (Coherence) increased from 2.1 to 5.4, demonstrating a consistent and measurable impact of the STAD program. These improvements suggested that team-based learning, structured activities, and guided peer support contributed to refining students' writing skills across multiple areas.

Standard Deviations

The posttest SD values are generally lower than the pretest SD values, signifying a more consistent performance among students after the intervention. This reduction in variability suggests that students' academic writing abilities became more standardized, with weaker students catching up to their peers due to cooperative learning, structured feedback, and team-based discussions. However, skills such as Argument Development (SD = 1.35) and Sentence Structure (SD = 1.05) retained relatively higher SD values, indicating some variation in individual progress in these areas.

Based on the statistical analysis, the researcher illustrated in the previous data, the research's hypothesis which stated that "There is a statistically significant difference in the 1st year EFL students' mean scores of the pre-post academic writing test" was confirmed.

Discussion and Interpretation of Results

The positive results of this research in improving students' academic writing skills can be better understood through key educational theories that support the use of the STAD strategy. These theories—including social development theory, cooperative learning, differentiated instruction, mastery learning, and motivation theory—offer important explanations for how and why the program was effective. Each theory contributed to shaping the structure of the intervention, guiding its

intervention, and supporting students' progress. The following discussion explains how these theoretical foundations influenced the research's sample, the design of the STAD-based program, and the overall success in developing academic writing skills through cooperation and student-centered learning.

Vygotsky's Social Development Theory played a central role in shaping the cooperative structure of the STAD strategy used in this research. The theory emphasized the importance of learning through social interaction and highlighted the Zone of Proximal Development (ZPD), where students can develop skills beyond their current level with the support of more knowledgeable peers. This idea was clearly reflected in the program's design, where students were grouped into mixed-ability teams that enabled peer support and cooperative progress. As a result, the program's environment promoted shared responsibility and mutual growth, supporting students as they moved through their ZPD and achieved noticeable improvement in their academic writing.

In line with the principles of cooperative learning strategy, the STAD fostered active engagement and team-based accountability throughout the academic writing process. By encouraging joint responsibility for shared goals, the strategy helped students exchange ideas, provide peer feedback, and complete tasks cooperatively. These structured interactions created a supportive learning environment that promoted critical thinking, drafting, and revision all essential components of academic writing. The observed progress in students' posttest performance confirmed the benefits of cooperative learning, where the social dynamic of teamwork reinforced academic standards and allowed students to build and refine their writing through meaningful peer interaction.

The principles of differentiated instruction were also evident in the success of STAD strategy, particularly in addressing the varied learning needs of the research sample. By enabling flexible roles within each team, the strategy allowed students to contribute based on their strengths while simultaneously receiving the support needed to develop weaker areas. This structure offered space for individualized engagement, where students could progress at different paces within the same activity. Those who struggled with certain aspects of writing were supported through peer guidance and practice opportunities, while more advanced students solidified their understanding by mentoring others. The diverse outcomes across writing skills within the sample underscored the strategy's

responsiveness to individual differences, confirming the value of differentiated instruction in enhancing academic writing.

Mastery learning theory further underpinned the research's approach by emphasizing the importance of time, practice, and feedback in achieving academic proficiency. The STAD program gave students multiple opportunities to engage with writing tasks, revise their work, and receive both peer and teacher feedback. This structure allowed students to gradually improve and refine their skills until they reached the desired level of competence. Rather than prioritizing speed, the strategy focused on steady, meaningful progress, which was evident in the significant posttest improvements across all academic writing skills. The design of the program encouraged students to move toward mastery at their own pace, highlighting the lasting impact of mastery-based instruction in skill development.

Lastly, the structured, skill-based nature of the program also contributed significantly to the observed progress. Beginning with foundational components like paragraph writing and thesis statements, the program gradually introduced more advanced writing skills, including formal grammar usage, objectivity, and paraphrasing. Each session built upon the previous one, ensuring progressive skill acquisition aligned with academic standards. Students were guided through a cycle of instruction, practice, feedback, and revision that allowed them to internalize writing conventions and apply them effectively in academic contexts. The program's concluding sessions, including a comprehensive review and a final focus on paraphrasing, helped consolidate learning and prepare students for independent academic writing. These outcomes mirror those of previous studies that highlight the role of cooperative learning strategies like STAD in promoting writing competence among EFL students. Furthermore, the research highlights the broader value of academic writing as a tool for developing transferable skills such as logical reasoning, research literacy, time management, and argumentation, all of which are essential for academic success and professional growth.

This interpretation clearly demonstrates that the intervention of the STAD strategy had a significant and positive impact on the academic writing performance of first-year EFL students. The marked improvement in students' posttest scores, as compared to their lower pretest performance, highlights the effectiveness of cooperative, student-centered learning in addressing initial gaps in academic writing proficiency. By leveraging peer cooperation, structured practice, and targeted feedback, the STAD-based intervention empowered students to

move beyond their previous limitations and develop essential academic writing skills. This contrast between the students' initial low achievement and their substantial posttest gains underscores the transformative role of the STAD strategy in fostering academic writing growth, promoting equitable learning opportunities, and supporting meaningful progress in EFL academic writing instruction.

The findings of this research strongly aligned with previous research, underscoring the effectiveness of cooperative learning, particularly the STAD strategy, in enhancing various types of writing skills among EFL students. Numerous studies have highlighted the positive impact of STAD on different aspects of writing proficiency. For instance, Nisa and Sari (2019) found that STAD was more effective than traditional lecture-based instruction in developing academic writing skills, especially for visual and auditory students. Similarly, Poetra, Gustiana, and Santoso (2019) reported significant improvements in students' ability to construct cohesive and well-structured narratives after STAD intervention. Barus et al. (2020) further confirmed that STAD facilitated better writing organization and fluency in recount text composition. Additionally, Udit and Hashim (2020) demonstrated that STAD enhanced engagement and descriptive writing skills among Primary 5 pupils. The impact of STAD was also evident in Kurniasari's et al. (2022) Classroom Action Research, which revealed improvements in content development, vocabulary use, and grammatical accuracy in narrative writing. Similarly, Sulaeman and Hoon (2024) highlighted STAD's effectiveness in enhancing explanatory text writing, particularly in terms of improving coherence and organization. Collectively, these studies corroborate the present research's findings, illustrating that STAD is a highly effective strategy in fostering the development of various types of writing, including academic, narrative, descriptive, and explanatory writing skills among EFL students.

Conclusion and Recommendations
Conclusion

1. Impact of the STAD strategy on academic writing skills. The results of the research provide compelling evidence that the Student Teams-Achievement Divisions (STAD) strategy has a significant positive impact on improving the academic writing skills of   EFL   students.

2. Improvement in writing performance. Notable improvements were observed in students' writing performance, particularly in areas such as language structure, writing style, and organization of ideas.

3. Increase in motivation and self-confidence. The STAD strategy contributed to enhancing students' motivation and self-confidence through activities based on cooperative and peer support within teams.

4. Development of an interactive learning environment. STAD created an interactive and supportive learning environment that facilitated more effective learning experiences, contributing to students' academic development.

5. Academic achievement through cooperative learning. The findings emphasize the importance of integrating cooperative learning strategies, such as STAD, in academic writing programs to enhance students' academic performance and encourage active participation.

6. Potential for Broader Application of STAD The study highlights the potential of STAD as an effective strategy for academic writing development across various educational contexts, offering valuable insights for future instructional practices.

Educational Implications

1. Integrating the STAD strategy into educators' pedagogical practices for academic writing

Integrating the STAD strategy into educators' pedagogical practices promotes cooperation, peer interaction, and problem-solving, which in turn significantly enhances the academic writing abilities of EFL students.

2. Promoting a supportive environment for academic writing development

Creating a supportive environment for academic writing helps nurture students' confidence in their writing abilities. Educators should foster an atmosphere where students feel comfortable expressing their ideas and sharing their written work, while also encouraging peer cooperation and offering constructive feedback to motivate students and boost their confidence in academic writing.

3. Continuous professional development for educators on academic writing and STAD

Continuous professional development is essential for educators to effectively implement STAD and improve academic writing. Educators should attend workshops, seminars, and training programs focused on cooperative learning strategies and academic writing to gain the necessary skills to integrate STAD into their writing instruction.

4. Impact of STAD strategy on academic writing skills

The STAD strategy-based program has shown significant effects on improving academic writing skills among EFL students. enhancing their ability to construct well-organized, coherent, and articulate written work.

5. Enhancing self-Directed learning in academic writing through STAD

STAD not only promotes interaction among students but also encourages them to take responsibility for their own writing, especially during the individual phase of the strategy, where students critically engage with their writing, thereby enhancing their self-directed learning and writing abilities.

6. Cooperation among stakeholders to improve academic writing instruction through STAD

Effective intervention of STAD to enhance academic writing requires cooperation among teachers, researchers, policymakers, and administrators. Open dialogue among these stakeholders ensures that decisions align with the goals of improving academic writing instruction for EFL students.

7. Adopting alternative assessment strategies for academic writing in STAD

The research highlights the importance of adopting assessment strategies aligned with STAD's objectives. Educators should explore assessment methods that evaluate not only individual writing skills but also cooperative writing abilities, peer feedback, and group contributions, providing a more comprehensive measure of academic writing proficiency.

8. Fostering a teacher-student partnership in the development of academic writing skills

A strong partnership between teachers and students is essential for the development of academic writing skills. Educators should encourage open communication, involve students in setting writing goals, and provide opportunities for self-assessment and reflection, empowering students to take ownership of their academic writing development.

9. Acknowledging students' diversity to enhance academic writing through STAD

STAD strategy encourages educators to recognize and accommodate students' diverse backgrounds in academic writing activities. Cooperative learning strategies like STAD offer opportunities for students to learn from each other's linguistic and cultural perspectives, enriching their academic writing skills and promoting intercultural understanding.

 Recommendations

    The following recommendations are based on the results and the conclusions drawn from this research:

 1. Integrating the STAD strategy into academic writing curricula for EFL university programs

- Incorporate STAD-based activities and assignments into academic writing courses.
- Develop specific modules that allow students to collaborate on various writing tasks.
- Align STAD activities with course objectives to enhance students' academic writing skills.

2. Providing specialized training for EFL instructors on STAD intervention

- Offer workshops and training sessions to familiarize EFL instructors with the principles and strategies of STAD.
- Equip teachers with the necessary skills to facilitate cooperative learning environments.
- Focus on best practices for integrating STAD in academic writing instruction.

3. Prioritizing the development of academic writing skills among EFL students

- Focus on enhancing academic writing skills as a key component of EFL curricula.
- Incorporate activities that promote both individual and cooperative writing practice.
- Design writing tasks that emphasize clarity, organization, and argumentation skills.

4. Establishing a cooperative learning environment to support EFL students

- Create a learning environment where both students and instructors feel valued and supported.
- Foster open communication and cooperation among students and between students and teachers.
- Encourage a cooperative atmosphere that promotes peer feedback and shared learning.

5. Creating a language-rich classroom environment to support EFL students
- Design a classroom environment that immerses students in the English language.
- Display English posters, word walls, and relevant materials to reinforce language learning.
- Promote opportunities for students to use English actively through team activities, discussions, and presentations.

6. Monitoring student progress and providing timely feedback
- Regularly assess students' progress using both individual and team performance criteria.
- Provide constructive, timely feedback to guide students' improvements in academic writing.
- Encourage self-assessment and peer evaluation to foster reflective learning and accountability.

7. Teaching cooperation and communication skills for effective teamwork
- Emphasize the importance of active listening and respectful communication within teams.
- Encourage students to provide constructive feedback and support one another in cooperative tasks.
- Develop students' interpersonal and teamwork skills to enhance their overall language learning experience.

Suggestions for Further Research

The following suggestions can be considered for further research:

1. The effectiveness of the STAD strategy in facilitating vocabulary acquisition among EFL university students: a research on cooperative vocabulary learning activities.

2. The impact of the STAD strategy on the development of grammar and writing skills among EFL university students.

3. Enhancing pronunciation skills of EFL university students through the STAD strategy: an investigation into pronunciation accuracy and fluency.

4. The impact of the STAD strategy on the motivation and self-efficacy of EFL university students.

5. EFL teachers' perspectives on integrating the STAD strategy into language learning: a survey research.

6. Developing intercultural communicative competence among EFL university students through the STAD strategy.

7. Comparing the effectiveness of STAD with other cooperative learning strategies in EFL university classrooms: a comparative research.

8. The effectiveness of the TGT (Teams-Games-Tournaments) strategy in enhancing writing skills among EFL university students.

9. The impact of the Jigsaw strategy on the writing skills of EFL university students: exploring cooperative task completion and Its effects on writing abilities.

10. Exploring the long-term effects of the STAD strategy on EFL university students' language proficiency

References

Abdelwahab, A. F. (2020). Enhancing postgraduate English majors' academic writing skills and self-efficacy using metadiscourse markers. *Fayoum University Journal of Educational and Psychological Sciences*, 14(6), 775- 816.

Ahmad, S. Z. (2020). Virtual research teams to develop EFL students' research and academic writing skills. *Munufya Journal of Faculty of Education, 35*(2), 2-35.

Aliyu, A. S., & Buhairi, I. (2019). Effect of STAD strategy on students' performance in 3-D shapes among secondary school students with varied ability levels in Kaduna state, NIGERIA. *Journal of Library, Science Education, 1*(1), 102-110.

Aryani, D. (2016). *The Use of Cooperative Learning STAD to Improve Speaking Skills of Accounting Program Students grade XI in SMKN 1 Depok in The Academic Year of 2013/2014* [Bachelor's thesis, Universitas Negeri Yogyakarta].

Bailey, S. (2015). *Academic writing: A handbook for international students* (4th Ed). Routledge.

Bak, N. (2003). *Guide to academic writing*. University of the Western Cape.

Barokah, A. R. (2020). The effectiveness of Student Teams Achievement Divisions (STAD) method toward students' motivation in reading comprehension at the seventh grade of SMPN 2 Ponorogo in academic year 2019/2020 [Bachelor's thesis, The State Institute of Islamic Studies Ponorogo].

Barus, L. D. G., Herman, H., & Niswa, H. (2020). *The effect of Student Teams Achievement Divisions (STAD) on students' writing ability in recount text*. *Journal of English Education and Teaching, 4*(4), 536-547. https://doi.org/10.33369/jeet.4.4.536-547

Boudehane, N. (2015). Implementing Slavin's students team-achievement divisions (STAD) on second-year students at the department of letters and English, University of Constantine 01. *Revue Expressions*, 54-62.

Budiyono, S., & Ngumarno, N. (2019). Improving student learning achievements through the application of the student teams achievement divisions (STAD) method. *Journal of Applied Studies in Language, 3*(2), 140-147.

Candlin, C. N., Crompton, P., & Hatim, B. (2016). *Academic writing step by step: A research-based approach*. Equinox. https://doi.org/10.1016/j.jslw.2016.03.003

Chin, P., Reid, S., Wray, S., & Yamazaki, Y. (2012). *Academic writing skills 3 student's book.* Cambridge University Press.

Compton, S., Kamei, R., & Cook, S. (2016). The history and future of Team-Based Learning. *Proceedings of Singapore Healthcare, 25*(1), 3-4.

Deswarni, D. (2018). The effect of using STAD strategy toward students' reading comprehension. *Al-Ishlah: Jurnal Pendidikan, 10*(1), 116-130.

Grami, G. M. A. (2010). The effects of integrating peer feedback into university-level ESL writing curriculum: A comparative research in a Saudi context [Doctoral dissertation, Newcastle University].

Guterres, A. (2024). Application of STAD model cooperative learning to improve mathematics learning activities of grade VI students of SDN XI No. 40 Blimbing, Malang Regency. *Eduvest - Journal of Universal Studies*, 4(7), 5976-5995. https://doi.org/10.59188/eduvest.v4i7.1576

Hyland, K. (2003). *Second Language Writing. Cambridge*: Cambridge University Press. https://doi.org/10.1017/CBO9780511667251

Ishtiaq, M., Ali, Z., & Salem, M. S. (2017). An experimental research of the effect of student teams achievement divisions (STAD) on vocabulary learning of EFL adult students. *Arab World English Journal, 8*(3), 356-375. https://dx.doi.org/10.24093/awej/vol8no3.23

Jamaludin, M., & Mokhtar, M. F. (2018). Students team achievement division. *International Journal of Academic Research in Business and Social Sciences, 8*(2), 570-577.

Khidr, Z. H., & Sabri, W. M. N. (2022). The impact of STAD strategy on the academic achievement of eighth-grade students in sciences subject and developing their scientific trends. *Journal of Arts, Literature, Humanities and Social Sciences, (82)*, 208-239.

Kozak, M. (2022). Academic writing, and how to write in a clear and comprehensible way. Scientia Agricola, 79(1). https://doi.org/10.1590/1678-992x-2020-0286

Kurniasari, R., Regina, R., & Bunau, E. (2022). Improving students' narrative text writing through Student

Team Achievement Division (STAD) method. *Journal of English Education Program,* 3(2). https://doi.org/10.26418/jeep.v3i2.54281

Liu, Y., Zhang, M., Zhao, X., & Jia, F. (2021). The role of teacher enthusiasm and classroom enjoyment in fostering EFL students' language achievement. *Frontiers in Psychology, 12,* 781118.

Madang, K., & Ong, E. T. (2023). Effectiveness of the Student Team Achievement Division (STAD) cooperative learning model in enhancing pre-service teachers' scientific attitudes in learning vertebrate zoology. *Jurnal Penelitian Pendidikan IPA, 9*(11), 9494-9502. https://doi.org/10.29303/jppipa.v9i11.4418

Mekhnane, F., & Khelef, S. (2016). *Investigating EFL Students' Need in Writing Academic Essay: the case of First Year Master Applied Linguistics and ESP Students at Ouargala University* [Master's thesis, Kasdi Merbah Ouargla University]. Algeria.

Mohammad, S. I., Abdelrasheed, N. S. G., Minasova, A. S., & Vasudevan, A. (2024). A gauge into emotional intelligence enhancement in CALL and the effects on oral skills, personal best goals, and self-efficacy among EFL students. *CALL-EJ, 25*(4), 552-577.

Murdani, M., Muhammad, M., Amin, B., Ulfa, M., & Haikal, M. (2019). Use of cooperative learning methods STAD strategies to improve students' abilities in Qira'ah. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal, 2*(1), 38-49.

Nazario, L., Borchers, D., & Lewis, W. (2010). *Bridges to better writing* (1st ed.). Cengage Learning.

Nisa, B., & Sari, S. W. (2019). The effectiveness of Student Teams-Achievement Divisions in enhancing visual and auditory skills for English students' writing proficiency. *Lingua Cultura, 13*(2), 121–128. https://doi.org/10.21512/lc.v13i2.5339

Oshima, A., & Hogue, A. (2007). *Introduction to academic writing* (3rd ed.). The Longman Academic Writing Series. Pearson/Longman.

Poetra, E. P., Gustiana, D. S., & Santoso, I. (2019). Improving the students' writing narrative text by applying cooperative learning type student teams achievement divisions (STAD). *PROJECT (Professional Journal of English Education)*, 2(4), 588-593.

Purnomo, A. E., Harmanto, B., & Indriastuti, N. R. (2019). The use of student team achievement division (STAD) in improving writing ability at the eleventh grade of SMA N 1 Nawangan in academic year 2019/2020. *EDUPEDIA*, 3(2), 48-55.

Rahmatika, A. (2019). The effectiveness of Student Teams Achievement Division to teach writing viewed from students' creativity. *International Journal of Language Education, 1*(1), 46-54.

Rasulova, M., & Ataullayeva, S. (2024). Teaching academic writing in English: Approaches and products. E3S Web of Conferences, 413, 03022, 1–7. https://doi.org/10.1051/e3sconf/202341303022

Sheehy, M. (2019). *Academic writing handbook for students in the FET sector.* Further Education Support Service (FESS).

Shields, M. (2010). *Essay writing: A student's guide*. Sage.

Slavin, R. E. (1995). *Cooperative learning: Theory, research, and practice* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Slavin, R. E. (2005). *Cooperative learning teori, riset dan praktik*. Bandung: Nusa Media, 236.

Strongman, L. (2014). *Academic writing.* Cambridge scholars publishing.

Sufanti, M., Hadi, C. A., Santosa, F. S., & Tirtayasa, S. A. (2021). The influence of STAD cooperative strategies (teaching aids and multimedia PowerPoints) and learning style on mathematics learning outcomes. *Jurnal Pendidikan Matematika dan IPA, 12*(1), 40.

Sulaeman, A., & Hoon, K. D. (2024). Cooperative learning type of Student Team Achievement Division on learning outcomes writing explanation texts of HUFS Korea students. *Journal of English Language and Literature (JELL)*, 9(2), 275–282. https://doi.org/10.37110/jell.v9i02.231

Sulaiman, S. H. (2022). Students' ways of understanding academic writing. Journal of General Education and Humanities, 1(4), 163–174. https://doi.org/10.58421/gehu.v1i4.32

Udit, M. A., & Hashim, H. (2020). Student Team Achievement Division (STAD) method: To improve the descriptive writing skills of Primary 5 pupils. *International Journal of Academic Research in Business and Social Sciences,* 10(2), 635-647

Wahyuningsih, I. (2017). Pengaruh model pembelajaran kooperatif tipe group investigation Terhadap Hasil Belajar IPA. *Jurnal Ilmiah Pendidikan IPA*, 4(1), 26–33. http://dx.doi.org/10.30738/natural.v4i1.1861

Weigle, S. C. (2002). *Assessing Writing*. Cambridge University Press. https://doi.org/10.1017/CBO9780511732997

Yasunaga, A. (2023). Team-based learning for developing academic skills through cooperation. *JALT Professional Development, 2022*(26), 228-235.

Zaretsky, V. (2021). One more time on the Zone of Proximal Development. *Cultural-Historical Psychology, 17*(2), 37-49. https://doi.org/10.17759/chp.2021170204

ابو حرب، يحي؛ الموسوي، علي؛ وأبو الجبين، عطا. (2004). *الجديد في التعلم التعاوني*. مكتبة الفلاح للنشر والتوزيع.

الحوشاني، عائشة عبدالله علي؛ والنصيان، عبدالرحمن بن محمد. (2020). واقع الممارسات التدريسية لمعلمات اللغة الإنجليزية في تعليم مهارة
الكتابة في المرحلة الثانوية. *مجلة كلية التربية*، جامعة الأزهر، (158)، 725-765.

الديوري، محمد. (2008). منهجية الكتابة الأكاديمية والكتابة المهنية. (عبد الجليل ناظم، مترجم). دار توبقال للنشر.(نشر العمل الأصلي 2007).

آل سيف، عادل عوض. (2018). أثر استخدام استراتيجية التعلم التعاوني"STAD" على إتقان التلاوة لدى طلاب الصف الثاني الابتدائي. *مجلة
كلية التربية*، أسيوط ، 34(1)،557-583.

الأحول، أحمد سعيد محمود. (2015). برنامج تدريبي لتنمية مهارات الكتابه الاكاديمية لدى طلاب كليات التربية. *مجلة القراءة والمعرفة*، كلية
التربية، جامعة عين شمس.

العدوان، زيد.، وداوود، أحمد. (2016). *النظرية البنائية الأجتماعية وتطبيقاتها في التدريس* (ط1). مركز ديبونو لتعليم التفكير.

خصاونة، رعد مصطفى. (2008). *أسس تعليم الكتابة الإبداعية*. عالم الكتب الحديث ـ جدارا للكتاب العالمي.

خليل، إبراهيم؛ والصمادي ، امتنان. (2008). *فن الكتابة والتعبير*. دار المسيرة. عمان

ذيب، أحمد. (2021). تطوير مهارة الكتابة الأكاديمية: بحث في الخصائص والأدورات. *مجلة الشهاب*، 7(3)، 667-684.

قنصوة، أماني محمد عبدالمقصود. (2020). فاعلية مواقف تعليمية قائمة على نتائج بحوث المخ في تنمية الكتابة الأكاديمية ودافعية الإنجازلدى
طلاب الدبلوم العام (تخصص لغة عربية) بكلية التربية جامعة حلوان. *مجلة كلية التربية*، 20(1)،181-255.

نصر، حمدان علي حمدان. (1999). آراء طلبة الصف الثاني الثانوي في الأردن حول مدى توظيف عمليات الإنشاء في المواقف الكتابة التعبيرية.
مجلة جامعه دمشق، 15(3)، 223-277.

هلالى، هدى محمد محمود. (2019). فاعلية استراتيجية الرحلات المعرفية لتنمية مهارات الكتابة الأكاديمية والتفكير التأملي لطلاب الدراسات العليا
بكليات التربية. *مجلة كلية التربية*، 16(87)، 144-204.