

# The Effectiveness of Brainstorming Strategies on Essay Writing in EFL Classes

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## ABSTRACT

*Brainstorming is a common pre-writing strategy to improve the generation, organisation, and language accuracy in writing an essay. The research paper explores how brainstorming can be effectively used to enhance the performance of EFL students in writing an essay in Oman. The quasi-experimental, mixed-methods design was used with the participation of 100 intermediate-level students of Sohar University. The participants were divided into experimental and control groups. The experimental group was taught three brainstorming techniques, i.e. mind mapping, clustering, and free writing, whereas the control group was taught the traditional writing techniques. They were collected using pre-test and post-test essays, surveys and semi-structured interviews. Quantitative outcomes depicted that the brainstorming strategies used on students showed significant differences in the enhancement of coherence, organisation, fluency, and linguistic accuracy. The qualitative results also revealed that there was a higher confidence level, improved organisation of ideas, and less anxiety in writing. The paper emphasises the value of combining structured and culturally responsive brainstorming in EFL classrooms. It also highlights the importance of traditional and digital brainstorming tools in terms of increasing student engagement and writing quality. These results have pedagogical implications that can be applied in practice to enhance writing training in related EFL settings..*

## KEYWORDS

*Brainstorming, EFL writing, essay writing, pre-writing strategies, language learning*

## 1. INTRODUCTION

The EFL instructed use of essay writing is a pillar which involves coherent and critical thinking at a high level of linguistic competency. It involves logical critical thinking and language competence. Under prewriting strategies, brainstorming has presented prospects of overcoming language challenges and the ability to produce ideas and arrange them well. The value of promoting aspects of creativity and collaboration is particularly noted in the research of Ahmed and Atef Mahmoud Ahmed [2][5]. Nevertheless, the most under-explored ones are the cultural and contextual issues, particularly in Oman and other countries facing a similar situation. The given work tries to examine how brainstorming is impactful on writing an essay and which culturally appropriate methods should be used with EFL students.

### 1.1. Research Background

Ahmed highlighted the benefits of brainstorming in encouraging idea generation; however, he also identified obstacles such as time constraints and insufficient teacher training. [2]. The level of creativity and teamwork is raised by brainstorming, which was provided by Atef Mahmoud Ahmed, who noted that students can generate original text using brainstorming technique [5]. Zarei and Feizollahi emphasized the advantages of group brainstorming when it comes to reducing anxiety in a gradual manner and promoting the sharing of ideas to create supportive writing conditions [9]. Alqasham and Al-Ahdal discovered that mind mapping is beneficial for

developing logical flow of ideas, and Handayani and Mantra supported this idea by demonstrating that peer interaction during collaborative brainstorming in EFL classes enables further critical thinking and better essay structure [7].

Cultural and environmental variables have great impact on the success of brainstorming. Alqasham and Al-Ahdal state that the technique of brainstorming methodologies may be optimized when the methodology is adjusted to the cultural standards of the learners [3]. Collectivist societies would think in a group brainstorming, and individual brainstorming would be effective in an individualistic society.

The authors had observed positive influence of EFL pre-writing strategies such as brainstorming on the coherence of EFL essays, even in a structured writing task [10]. It has also enhanced the possibilities of brainstorming through the application of technology. Abedianpour and Omidvar established that interactive capabilities of digital tools such as Padlet and Mind Meister boosted engagement and creativity, whereas Rahimi and Fathi established that digital brainstorming tools promoted higher quality and quantity of thoughts than traditional tools [1][8]. Badie noted that brainstorming de-stressed students and improved their thought processes [6].

These articles demonstrate that there are several benefits and transformative possibilities of brainstorming upon effective application in EFL writing lessons.

## **1.2. Problem Statement**

Although brainstorming is widely used in EFL classrooms, its cultural adaptation in Oman and its measurable impact on students' writing quality remain underexplored. This research focuses on both the classroom context and the integration of brainstorming into writing instruction.

### **1.2.1 EFL classroom's contextual**

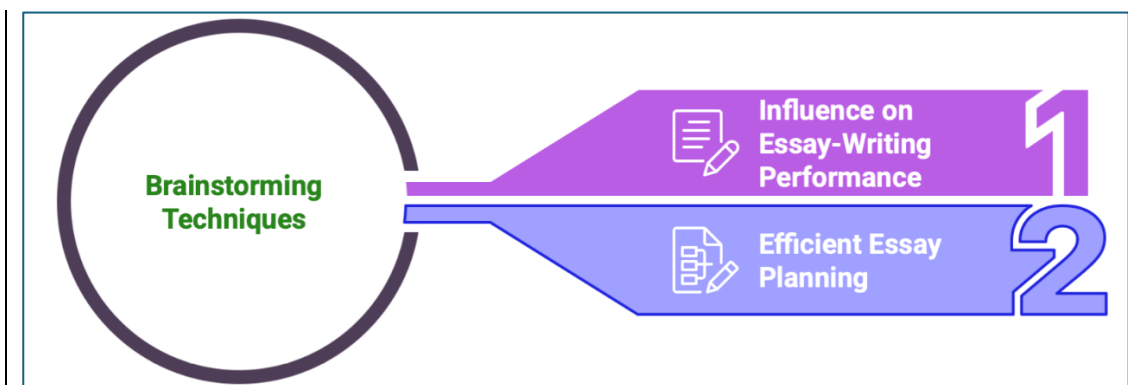
Although the use of brainstorming strategies is a common practice in EFL classrooms, limited studies are done on the contextualization of the strategies in cultural contexts. The cultural dynamics in the EFL learning environment can affect the effectiveness of the techniques of brainstorming. On a case example, Omani students may be introduced to some language and cultural obstacles that prevent their involvement in brainstorming tasks. It was discussed by Alqasham and Al-Ahdal who stated the issue of cultural relevance of brainstorming in EFL teaching and the need to incorporate culturally relevant approaches to the requirements of individual learners [3].

### **1.2.2 Brainstorming integration in writing**

Research is required that could tie the brainstorming strategies to the quantitative improvement of the EFL writers in their writing abilities. Although a lot of research examines brainstorming, not all studies give clear evidence that such strategies enhance the quality of essays written by students. Ahmed points to the problems experienced by instructors who introduce brainstorming in instruction, which inevitably leads to the need for validated results [2]. This study proposal addresses the knowledge gap in the topic of brainstorming techniques for developing writing abilities with quality coherence, structure, and linguistic accuracy.

### 1.3. Objectives of the study

The brainstorming techniques influence two important spheres of academic writing as shown in the diagram. First, they could improve the writing essays performance by helping learners with the process of creating, organizing and presenting their ideas much better [2][4]. Students are able to make the process of planning ideas of the essays easier and helps students in structuring their work in a clear and coherent manner [3].



**Figure.1** illustrates the study's objectives, highlighting how brainstorming techniques are explored to enhance EFL students' essay-writing performance and support efficient essay planning strategies.

Collectively, these advantages highlight the importance of including brainstorming techniques in writing instruction.

- To explore how brainstorming techniques influence the essay-writing performance of EFL
- To find the most efficient way of planning the essay in order to check the cohesion, structure and accuracy in linguistics.

### 1.4. Research Questions

The research question aims to describe how different brainstorming strategies influence EFL students' essay-writing performance and identify which techniques most effectively improve essay quality. The research questions are listed below,

1. How do brainstorming strategies affect the essay-writing performance of EFL students?
2. What brainstorming techniques work best for improving essay quality?

### 1.5. Significance of the study

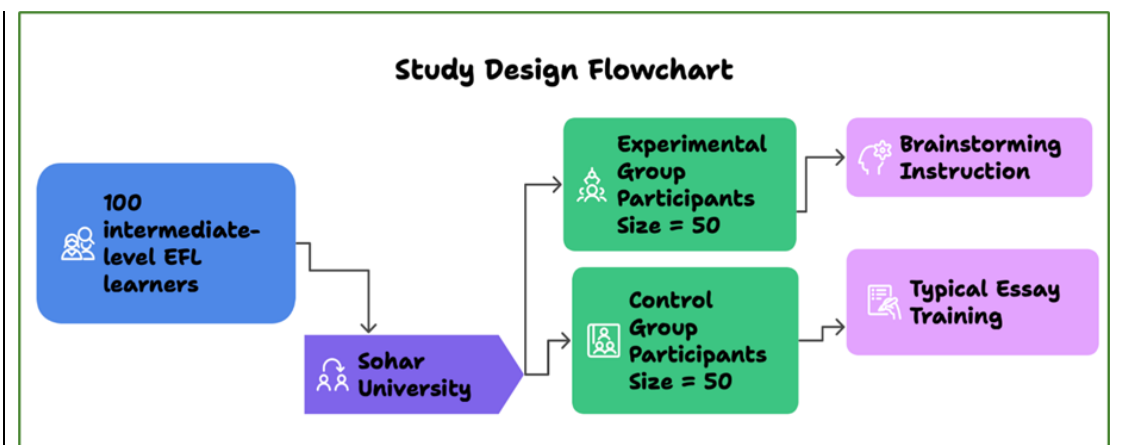
Relevance of the study depends on the probability of addressing the gap that exists between application and hypotheses of EFL writing. The research was evidence based because it examines the impact of brainstorming skills in writing development giving teaching guidance on how to improve the pre-writing experience in language schools. It also considers the cultural background of Oman, making the findings relevant and applicable to local EFL classrooms.

## 2. METHODOLOGY

### 2.1. Research design

This research utilized experimental research design to examine how brainstorming strategies impact on the skills of essay writing. The participants were divided into two samples: experimental with receiving brainstorming teaching and control with receiving traditional instruction. To measure the changes in writing performance, pre-test and post-tests were employed, and the quantitative data was supported by the qualitative one.

### 2.2. Participants



**Figure 2.** presents the participant distribution, showing 100 intermediate-level EFL learners at Sohar University divided into an experimental group receiving brainstorming instruction and a control group receiving typical essay training.

The above flowchart illustrating 100 intermediate-level EFL students in Sohar University who were split into two groups. The experimental group comprised 50 participants who were specifically taught on three brainstorming strategies, namely, mind mapping, clustering, and free writing. They incorporated these methods in their writing lesson to improve the ability to generate ideas and structure them. The traditional essay writing with no brainstorming support was used as the control group (50 participants).

### 2.3. Sampling procedure

This is a stratified sample method that was used to make sure that the gender, language competency, and academic background were fairly represented. Respondents were put into categories according to these variables. The selection of the experimental and control groups of each stratum was random so that the groups could be compared without bias.

### 2.4. Tools used for data collection

The study employed three main tools: pre- and post-test essays to evaluate writing skills, interviews to capture experiences, and surveys to explore students' and teachers' perceptions.

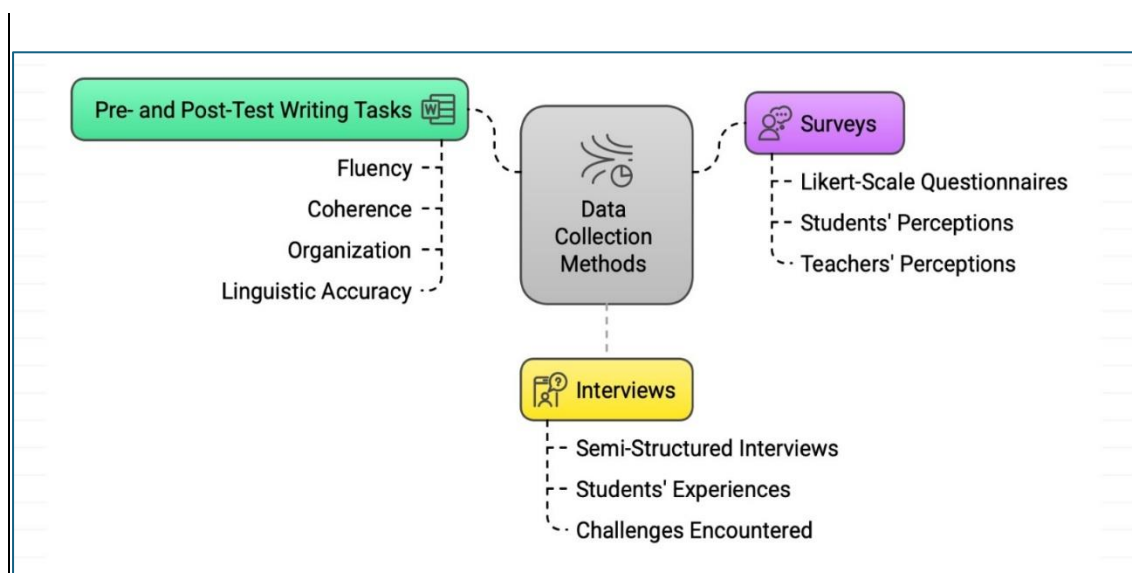
#### 2.4.1 The pre/post-test essays assess writing skills

The evaluation was done with the help of a rubric which concentrated on the main points of writing performance, such as the idea generation, organisation, coherence, use of

vocabulary, grammatical correctness and mechanics. It was possible to assess thoroughly the results of brainstorming strategies on the content and form of the writing of students. Post-test and pre-test result also enabled the study to establish how far brainstorming enhanced the capacity of the learners to plan, develop and produce their ideas effectively in English.

### 2.4.2 Interview

Experiences of brainstorming are investigated by interviewing this includes Semi-structured interviews were carried out with a sample of both experimental (n = 50) and control (n = 50) participants to understand their experiences and perceptions of the essay writing, and in the case of the experimental group, the use of brainstorming strategies. The interview guide contained 6 open-ended questions that concentrated on the writing habits of the students, the perceived advantages or difficulties, and feelings about using brainstorming techniques in academic writing. The interviews were conducted in a relaxed and informal manner (lasting about 5 minutes) and recorded on tape with their permission, which was transcribed and subjected to a thematic analysis.



**Figure 3.** Illustrates the study’s data collection methods, combining writing tasks, surveys, and interviews to capture students’ performance, perceptions, and experiences with brainstorming instruction.

### 2.4.3 Surveys

A post intervention survey was conducted on the experimental and control group to measure the perceptions of students regarding writing essays and utilizing the brushing stroke. The scale had 19 items with a 5-point Likert scale (1 strongly disagree to 5 strongly agree). The items were sorted into four categories, which included confidence and writing habits, brainstorming strategies, writing challenges, and perceptions of future use. The control group survey did not include brainstorming-specific items. Cronbach's alpha (= .87) was used to measure the internal consistency of the scale, which is high.

## 2.5 Data collection procedure

The table 1 data reveals that the research has started with pre-test during which the two groups were required to write an essay without the support of brainstorming, and thus baseline performance has been set. The intervention taught the experimental group to brainstorm (mind mapping, clustering, and free writing) expressly during eight weeks with frequent feedback to improve writing. The control group followed the traditional instruction in the essay writing without brainstorming assistance.

The post-test essay was carried out in a similar condition as the pre-test to evaluate improvements after the intervention. The feedback of the students was collected in the form of interviews to offer some qualitative information on the issues and the effectiveness of the provided techniques of brainstorming.

**Table 1.** Presents a structured comparison of experimental and control groups across four phases—pre-test, intervention, post-test, and feedback—highlighting instructional differences and evaluation methods.

Phase	Experimental Group	Control Group
Pre-test	Writing task without brainstorming (N = 50)	Writing task without brainstorming (N = 50)
Intervention	Instruction in brainstorming strategies (5 sessions, 10 min each)	Traditional essay writing instruction (5 sessions, 10 min each)
Post-test	Writing task without brainstorming	Writing task without brainstorming
Feedback	Semi-structured interviews on brainstorming	Semi-structured interviews on essay writing

## 2.6 Analytical procedure

The SPSS has been used to conduct qualitative analysis. In the result section, all the writing performance criteria such as coherence, organization, fluency and linguistic accuracy have been first computed using the descriptive statistics. The pre- test scores were performed in independent samples t-tests to establish baseline comparability of the groups. They were then followed by the introduction of paired samples t-test to find out the within group changes between pre-test and post-test although a one-way ANOVA was conducted to find the post test of the experimental and control sample. Satter et.al squared, and Cohen were also reported that met the practical significance of the findings in addition to statistical significance.

The confidence level and assumption tests were also done in order to guarantee the tests were sound. The thematic analysis was taken as the qualitative source of data because it was used in analyzing interviews with the students and observations in the classroom. The inductive coded responses were further subdivided into broad themes on the perceptions, challenges and benefits on brainstorming strategies by the students. The quantitatively and the qualitative findings were triangulated, and this facilitated a deeper understanding of the effect of intervention, and this contributed to increasing the validity of the findings.

### 3. RESULTS AND DISCUSSION

#### 3.1. Pre-test

The table 2 presents the pre-test essay scores of both groups, which were evaluated for coherence, organization, fluency, and linguistic accuracy. Independent samples t-tests showed no statistically significant differences between the experimental and control groups across all four categories ( $p > .05$ ), indicating that both groups were comparable at baseline, ensuring validity. **Table 2.** shows the pre-test essay marks of the two groups which were assessed on the aspects of coherence, organization, fluency and linguistic accuracy. There were no statistically significant differences in the experimental and control group in all four categories based on independent samples t-tests ( $p > .05$ ), which means that both groups were similar at the baseline.

Criterion	Experimental (n=50) M (SD)	Control (n=50) M (SD)	<i>T</i> (98)	<i>P</i>
Coherence	2.85 (0.61)	2.79 (0.64)	0.48	.632
Organization	2.91 (0.58)	2.87 (0.61)	0.31	.756
Fluency	2.76 (0.65)	2.70 (0.63)	0.45	.654
Linguistic Accuracy	2.68 (0.59)	2.71 (0.55)	-0.24	.810

#### 3.2. Post-test results and interpretation

This is post-test results after eight weeks of instruction. The experimental group, which received explicit training in brainstorming strategies (mind mapping, clustering, and free writing), demonstrated significant improvements compared to the control group.

**Table 3.** highlights those students, who practiced brainstorming strategies performed much better in coherence, organization, fluency, and accuracy than those in the control group.

Criterion	Experimental (n=50) M (SD)	Control (n=50) M (SD)	<i>T</i> (98)	<i>P</i>
Coherence	4.12 (0.56)	3.31 (0.64)	6.48	<.001
Organization	4.05 (0.52)	3.28 (0.61)	6.27	<.001
Fluency	3.94 (0.58)	3.21 (0.60)	5.97	<.001
Linguistic Accuracy	3.82 (0.63)	3.17 (0.55)	5.53	<.001

Students who were in the experimental group indicated much more confidence off writing the essay writing following the intervention ( $M = 4.20$ ,  $SD = 0.60$ ) that those who were in the control group ( $M = 3.40$ ,  $SD = 0.70$ ),  $t(98) = 5.23$ ,  $p < .001$ , Cohen's  $d = 0.74$ . This results aligns with the previous studies shows that pre-writing strategies improve both the quality and structure of EFL writing. for instance, studies have shown that brainstorming was facilitating ideas by generating and supporting logical sequence leading to more rational essays. Experimental group showed significant improvement in

the areas of coherence, organization, fluency, and linguistic accuracy over the control group and this is consistent with previous studies that have indicated the advantages of brainstorming in the EFL setting. Indicatively, Mohammed and Sadoon stated that, Iraqi EFL learners who brainstormed as a pre-writing process, came up with essays that were structurally more coherent and capable of generating ideas at higher levels [10]. On the same note, Abedianpour and Omidvari have reiterated that brainstorming strategies have positive effects on the writing performance and enhance the attitude of the learners towards writing tasks [1].

### **3.3. Within-group Comparisons**

Paired samples t-tests revealed that the experimental group made substantial improvements in post-test to pre-test in all criteria ( $p < .001$ ). The control group also showed slight improvements in coherence and organization, but these were not significant ( $p > .05$ ).

### **3.4. Qualitative Findings**

Analysis of interviews highlighted that students in the experimental group reported:

1. Improved idea organization
2. Time management challenges
3. Greater confidence in writing: For instance, one student commented that at the beginning, I thought that brainstorming was a waste of time, but as I continued, I came to realize that I was also able to organize my ideas in a better way

Educators reported that the brainstorming exercises stimulated a greater number of collaborative conversations, better essay outlines, and coherent drafts as compared to the control group. The recent research is also agree with the fact that structured prewriting strategies enable students in critical thinking and creativity as Ahmed, Hasan and Ameen reported these enable students to systematize their thoughts and generate linguistically correct writing [2]. This is consistent with findings by Handayani and Mantra, who reported that brainstorming enhances idea development and self-confidence in writing [7]. Moreover, digital adaptations of brainstorming, such as mind-mapping tools, have been shown to boost engagement and promote more comprehensive idea generation, which resonates with the potential for technology-assisted instruction in Omani EFL classrooms [3].

In addition, brainstorming appears to reduce writing anxiety, creating a more supportive learning environment. Zarei and Feizollahi prove that concept mapping and brainstorming reduce anxiety and improve accuracy, while Badie highlighted its role in stimulating problem-solving and creative thinking, even during periods of remote learning [6][9]. These outcomes suggest that brainstorming not only facilitates the mechanical aspects of essay writing but also enhances learners' psychological readiness and motivation. Furthermore, the collaborative forms of brainstorming, including wiki-mediated and peer-supported techniques, have been associated with higher levels of self-regulation and writing self-efficacy, indicating the social and cognitive benefits of group-based prewriting activities [5][8].

Collectively, these findings underscore the importance of integrating brainstorming strategies in EFL writing syllabus. They significantly highlight the need for culturally responsive instruction in Oman, where traditional rote-based approaches often dominate, limiting opportunities for creative and autonomous language use. By combining

cognitive, social, and technological perspectives, study confirms that brainstorming is an effective pedagogical tool for enhancing both the quality of writing and the overall learning experience of EFL students.

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This is post-test results after eight weeks of instruction. The experimental group, which received explicit training in brainstorming strategies (mind mapping, clustering, and free writing), demonstrated significant improvements compared to the control group.

## **4. CONCLUSION**

This study provides strong empirical evidence that brainstorming strategies significantly improve essay-writing skills among Omani EFL learners. The intervention enhanced the learners' ability to generate ideas, organize thoughts coherently, and produce linguistically accurate writing. Beyond improving mechanical writing skills, the use of brainstorming strategies fostered creativity, confidence, and collaborative engagement in the classroom.

The results are consistent with prior research that emphasizes the pedagogical value of prewriting strategies and support the integration of both traditional and digital brainstorming tools to maximize engagement and learning outcomes [1][2][3][10]. The findings also suggest that culturally sensitive application of brainstorming in Omani classrooms can address common challenges such as anxiety, limited idea generation, and lack of essay structure [7][9].

Future research should explore the long-term impact of brainstorming across different proficiency levels, investigate hybrid digital and collaborative approaches, and examine the sustainability of its effects on writing performance. Educators are encouraged to adopt structured prewriting strategies in EFL instruction, emphasizing creativity, autonomy, and critical thinking, which are essential skills for academic and professional success in line with global and Omani educational objectives.

## **4. ETHICAL APPROVAL AND CONSENT TO PARTICIPATE.**

The research used classmates as a data collection method. Samples were handed out in the classroom. The involvement was free, and anonymity was ensured, and no ethical concerns were outlined.

## **REFERENCES**

- [1] Abedianpour, S., & Omidvari, A. (2018). Brainstorming strategy and writing performance: Effects and attitudes. *International Journal of Applied Linguistics & English Literature*, 7(5), 38-43. <https://doi.org/10.17507/jltr.0905.24>.
- [2] Ahmed, S. M. A., Hasan, B. A., & Ameen, S. T. (2023). The importance of prewriting strategies in the students' writing production. *International Journal on Humanities and Social Sciences*, (45), 219-233. <https://doi.org/10.33193/IJoHSS.45.2023.573>.
- [3] Alqasham, F. H., & Al-Ahdal, A. A. M. H. (2022). Effectiveness of mind-mapping as a digital brainstorming technique in enhancing attitudes of Saudi EFL learners to writing skills. *Journal of Language and Linguistic Studies*, 17(2), 969-984.

- [4] Anggraini, F. (2020). Brainstorming technique in teaching writing descriptive text. *Channing: Journal of English Language Education and Literature*, 5(2), 71–74. <https://doi.org/10.30599/channing.v5i2.840>.
- [5] Atef Mahmoud Ahmed, E. (2021). Using Brainstorming and Problem Solving for Developing EFL Creative Writing Skills among Preparatory Stage., 32(126), 29-  
<https://doi.org/10.21608/jfeb.2021.228308>
- [6] Badie, M. M. (2020). Demonstrating the impact of brainstorming technique on EFL students and its consequences for improving the creativity of solving-problems during times of COVID-19 pandemic. *Journal of Tikrit University for Humanities*, 27(5), 33–44.<https://doi.org/10.25130/jtuh.27.5.2020.20>.
- [7] Handayani, N. D., & Mantra, I. B. N. (2022). Brainstorming as an effective strategy to improve students' writing skills. *Journal on Studies in English Language Teaching (JOSELT)*, 3(2), 34-42. <https://doi.org/10.24036/joselt.v3i2.5575>.
- [8] Rahimi, M., & Fathi, J. (2022). Exploring the impact of wiki-mediated collaborative writing on EFL students' writing performance, writing self-regulation, and writing self-efficacy: A mixed methods study. *Computer Assisted Language Learning*, 35(9), 2627–2674. <https://doi.org/10.1080/09588221.2021.1952270>.
- [9] Zarei, A. A., & Feizollahi, B. (2018). Concept mapping and brainstorming affecting writing anxiety and accuracy. *Journal of Modern Research in English Language Studies*, 5(1), 117–144. <https://doi.org/10.30479/jmrels.2019.10548.1320>.
- [10] Mohammed, M. A., & Sadoon, B. (2020). THE EFFECT OF BRAINSTORMING AS A PRE-WRITING STRATEGY ON IRAQI EFL MA LEARNERS' WRITING ABILITY. *International Journal of Research in Social Sciences and Humanities*, 10(2), 475-480. *ijrssh*. v10i02.047.