

Enhancing ESL Academic Writing Competence through Structured Arguments Mapping as a Pre-Writing Intervention

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Abstract

Academic writing is an essential competency in tertiary education; yet, numerous English as a Second Language (ESL) students encounter challenges in formulating coherent thesis statements and systematically elaborating on concepts. Conventional writing pedagogy frequently prioritises grammatical precision, offering less assistance in structuring thoughts prior to composition. This research examines the efficacy of Structured Argument Mapping (SAM) as a pre-writing pedagogical approach to improve Thesis Articulation and Conceptual Expansion in undergraduate ESL students. A quasi-experimental design featuring a pre-test and post-test with a control group was utilised involving 70 second-year undergraduates, divided into 35 participants in the control group and 35 in the experimental group. The control group underwent traditional writing education, whereas the experimental group engaged in a six-week SAM intervention. The writing proficiency of students was evaluated by an analytic writing rubric, and the results were examined utilising suitable statistical methods. The results indicated that the experimental group exhibited markedly superior advancement in formulating coherent thesis statements, elaborating concepts with rational justification, and crafting well-organised academic compositions compared to the control group. The research determines that Structured Argument Mapping serves as an efficacious pre-writing pedagogical approach for enhancing academic writing skills and has practical applications for ESL writing education at tertiary institutions.

Keywords

Structured Argument Mapping (SAM), ESL Academic Writing, Thesis Articulation, Conceptual Expansion.

1.Introduction

Academic writing is considered one of the key skills that is necessary for students in higher education. It serves as a means through which students can demonstrate their mastery of content knowledge through logical writing of information and arguments in a written discourse form. Effective academic writing does not only involve language competence but entails the process of integrating information, evaluating evidence, and constructing well-written arguments. Academic writing skills are especially difficult to develop by students of English as a Second Language (ESL) as writing is a socially constructed activity that entails the processes of language competency, cognition, and rhetoric. Hyland (2009) asserts that academic

writing is more than writing good sentences; rather, it entails the construction of meanings and participation in academic communities. In the same way, Swales and Feak (2012) assert that successful academic writing involves an understanding of academic discourse and communication of ideas in an organized manner. Therefore, academic writing skills have become a key target in English language education in higher institutions around the world.

Notwithstanding constant curricular improvements and innovations in the field of writing instruction, numerous undergraduate ESL students still face major problems in the process of crafting well-organized academic papers. Even when students possess good grammatical competencies and a

decent amount of vocabulary, they still have problems articulating a clear main idea and developing their thoughts into logical academic paragraphs. In the context of numerous components of academic writing, Thesis Articulation and Conceptual Expansion constitute some of the most challenging aspects. An unsatisfactory thesis statement leads to the lack of focus in the writing, while underdeveloped supporting evidence undermines textual coherence and argumentation. As stated by Ferris (2011), many second-language students are faced with problems that go far beyond mere grammar and include organization and development of ideas in the academic text. The same point is made by Nation (2001) who says that writing proficiency includes not only lexical awareness but also organizational abilities to present the content in a logical manner to a particular audience.

Writing in most ESL classes have traditionally focused on correcting errors, teaching grammatical structures, sentence building, and vocabulary building. Although such techniques are valuable for acquiring language skills, they do not afford learners much chance to systematically plan before writing. Consequently, most learners start writing without first establishing an argumentative direction or connecting their ideas. According to Graham and Perin (2007), good writing lessons should include explicit instruction on planning and organizing ideas rather than focusing on language precision only. Likewise, Flower and Hayes (1981) describe writing as a recursive cognitive process that includes planning, translating, and revising, implying that good writing requires strategic planning ahead of writing rather than corrections of sentences. It becomes clear that better planning can help improve the academic performance of learners.

One such method that takes care of such cognitive aspects is Structured Argument Mapping (SAM), which is a prewriting technique in which ideas are organized in a visual manner to create a framework before the actual writing process begins. By identifying the central thesis, the reasons for it, evidence for the thesis, objections, and connections, the SAM method allows learners to organize the structure of the academic text before

its writing. This method involves planning which allows students to analyze the interrelation among the ideas, remain focused on the concept, and organize the arguments sequentially. As Novak and Cañas (2008) note, visual representation of knowledge contributes to meaningful learning through organizing and integrating concepts systematically. In the same way, Davies (2011) states that the argument mapping technique helps in evaluating logical relations between claims and evidence. Thus, when used in ESL writing instruction, Structured Argument Mapping may turn the process of planning into a challenging cognitive activity.

Despite significant research on concept mapping, mind mapping, and other graphic organizer strategies, there has been a dearth of empirical research that deals directly with the issue of the efficacy of Structured Argument Mapping in facilitating Thesis Articulation and Conceptual Expansion in the context of ESL undergraduate learners. The extant literature seems to be heavily skewed towards enhancing writing performance, grammar, and organization, whereas Thesis Articulation and Conceptual Expansion have remained somewhat neglected. Moreover, empirical findings about the use of Structured Argument Mapping strategy in Indian higher education have not been abundant.

This deficiency has prompted the current study to examine the impact of Structured Argument Mapping as an instructional technique for pre-writing on the improvement of academic writing skills among undergraduate ESL learners at Dr. M.G.R. Educational and Research Institute. With a quasi-experimental research approach that involves control and experimental groups, the study explores the effect of Structured Argument Mapping on Thesis Articulation and Conceptual Expansion, which are important elements of academic writing. The current study hopes to make a contribution to the current ESL writing pedagogy through empirical evidence on the benefits of pre-writing instruction.

2. Literature Review

2.1 ESL Academic Writing

Writing constitutes one of the most challenging language skills for English as a Second Language (ESL) students since it combines language proficiency, critical thinking, and logical reasoning. Unlike general communication, academic writing requires learners to structure their arguments in a coherent manner, present objective evidence, and maintain consistency throughout the text. As Hyland (2009) describes, academic writing is closely associated with academic practices since writers are supposed to express their ideas in line with the requirements of specific academic communities. Likewise, Swales and Feak (2012) note that successful academic writing implies not only grammar skills but also knowledge of rhetoric and writing organization. Although learners receive special training on how to write academic texts, they still struggle with creating consistent texts because of their inability to organize their thoughts and arguments effectively. Ferris (2011) notes that second language writers need special teaching techniques that go beyond grammar to include writing strategies.

2.2 Thesis Articulation and Conceptual Expansion

Among the many aspects of academic writing, thesis articulation and conceptual expansion have an especially pivotal part in the effectiveness of written communication. Thesis articulation is the term used to describe how writers can present their texts with a clear, specific, and arguable central idea, while conceptual expansion is the process where the writer can develop that idea logically with supporting reasons and relevant examples. According to Oshima & Hogue (2014), having a clearly-articulated thesis statement can provide not only direction for the writer but also guidance for the reader as the basis for organizing their academic compositions. Flower & Hayes (1981) support the point by explaining that successful academic writing occurs in a recursive process of planning, idea generating, and revising, among other things. Nevertheless, ESL students often find it difficult to turn their initial ideas into a fully developed argument in academic writing due to the lack of planning techniques. As Nation

(2001) explains, merely having lexical knowledge does not ensure success in writing as learners also need to know how to organize and express their ideas efficiently.

2.3 Structured Argument Mapping in Writing Instruction

In order to solve these problems, visual approaches to planning that can help learners organize their ideas prior to writing have been widely studied by scholars. The Structured Argument Mapping (SAM) is a pre-writing strategy that allows learners to identify a main idea, structure reasons, evidence, and logical connections between ideas before writing. Argument mapping helps learners visualize their abstract thoughts, which decreases the cognitive load and contributes to better writing. As Novak and Cañas point out, “visual representation of knowledge supports meaningful learning by connecting learners' concepts in systematic ways.” Also, according to Davies (2011), argument mapping improves critical thinking because learners learn to evaluate logical connections between claims and evidence. Furthermore, according to Graham & Perin, explicit instruction in planning and organizing ideas plays an important role in improving writing. However, despite the significance of the above mentioned studies in showing the importance of structured planning strategies in education, empirical research on Structured Argument Mapping for ESL academic writing is under-researched.

2.4 Research Gap

Previous studies have shown the significance of planning strategies for developing writing skills; but only a handful of studies have been done on the effectiveness of Structured Argument Mapping to develop Thesis Articulation and Conceptual Expansion in ESL students. Besides, very little research data is available about the implementation of such strategy in the context of Indian higher education institutions. The current study thus seeks to fill this gap by investigating the effectiveness of Structured Argument Mapping on the same among the undergraduates of Dr. M.G.R. Educational and Research Institute.

3. Research Questions

- a) What is the effectiveness of Structured Argument Mapping (SAM) in improving the academic writing skills of undergraduate ESL students of Dr. M.G.R. Educational and Research Institute?
- b) To what extent does Structured Argument Mapping (SAM) improve Thesis Articulation among undergraduate ESL students?
- c) To what extent does Structured Argument Mapping (SAM) improve Conceptual Expansion among undergraduate ESL students?

4. Research Objectives

- a) In order to assess the effectiveness of SAM in improving the academic writing abilities of undergraduate ESL students of Dr. M.G.R. Educational and Research Institute.
- b) In order to assess the effectiveness of SAM in improving the Thesis Articulation of undergraduate ESL students.
- c) In order to assess the effectiveness of SAM in improving the Conceptual Expansion of undergraduate ESL students.

5. Methodology

5.1 Research Design

The current study, a quasi-experimental design of research that involved the pre-test/post-test control group method was adopted in order to find out how effective the use of SAM is for improving the academic writing competence of ESL undergraduates. Quasi-experimental research design was deemed appropriate for the study since it allowed comparing systematically the performance of students in the SAM group against the one of the control group, which underwent the traditional process of writing training. The participants in both groups took part in the same pre-test prior to the intervention and in the post-test after the six-week period of instruction, which helped measure their progress in writing.

5.2 Participants and Sampling

This research was carried out among 70 undergraduate ESL students studying at Dr. M.G.R. Educational and Research Institute, Chennai, India. The participants of the study were made up of second-year undergraduate students who were taking English language classes as part of their

academic program. In order to select participants for this research, a non-random purposive sampling method was used by selecting participants depending on their enrollment in the specific course and their similar English language proficiency. Participants were then divided into two intact groups where the first group which consisted of 35 students was exposed to SAM while the second group which was made up of 35 students continued with traditional academic writing class. The two groups studied the same syllabus, instructional time period, and schedule for assessments.

5.3 Research Instrument

The main tool used in this study was an academic writing test given to students as both a pre-test and post-test. Although the pre-test and post-test included writing on different topics, they were equally challenging and aimed at assessing similar academic writing skills. In order to assess students' skills of writing an academic paragraph, the tests required from students to demonstrate their competence in formulating a thesis statement and developing it with proper supporting details. Students' responses in the writing test were assessed using an analytic scoring rubric especially created for the current research. This rubric considered two key aspects of academic writing which are Thesis Articulation and Conceptual Expansion. In particular, Thesis Articulation was the measure of clarity, relevance, and precision of the central argument, while Conceptual Expansion was a measure of developing ideas in the paper. In order to increase the reliability of assessment, the same rubric was used for assessing both pre-test and post-test. Moreover, the current test instrument was reviewed by language teaching specialists in order to check its content validity.

5.4 Intervention Procedure

Intervention took place over a period of six weeks in order to test the impact of SAM on the improvement of academic writing skills of undergraduate ESL students. Prior to the intervention, pre-test was done for both groups in order to establish their current level of writing skills in Thesis Articulation and Conceptual

Expansion. Post-pre test, the two groups were exposed to different teaching techniques, yet tackling similar objectives of academic writing. The control group was subjected to traditional forms of writing lessons which focused on teacher explanations, text book exercises, class discussions, and writing practices by individual students. Development of academic paragraphs was done through traditional teaching techniques without employing visual planning procedures.

On the other hand, for the experimental group, the Structured Argument Mapping (SAM) method was used as an instructional tool for pre-writing. In each of the instructional lessons, the students were taught to develop ideas in a systematic way by determining a main thesis, reasons supporting the thesis, the choice of evidence and logical connections between the ideas before actually starting to write. The use of structured maps provided the learners with a planning strategy for writing coherent and logically related academic paragraphs. All through the intervention period, the students were engaged in guided classroom activities, collaborative discussions, feedback from teachers, and individual writing exercises using the maps they had created. At the end of the six-week intervention period, both groups took the post-test with another academic writing prompt with the same level of difficulty as the pre-test. The writing samples were assessed using the same analytic scoring rubric to determine the effectiveness of the Structured Argument Mapping technique in enhancing the thesis articulation and conceptual expansion of the participants.

5.5 Data Collection Procedure

Data collection involved three successive stages. First, pre-test was carried out to determine the pre-existing academic writing skills of both the control and experimental groups. After pre-testing, the six weeks' training program was conducted on each group using the teaching approach allocated to them. At the end of the program, a new post-test involving a different topic on academic writing was conducted for both groups. The results of pre-test and post-test for the students were analyzed using the same scoring rubric in terms of Thesis Articulation and Conceptual Expansion scores.

Table 1

5.6 Data Analysis

The data collected through the pretest and post-test was analysed using the jamovi statistical software package. The descriptive statistics such as mean and standard deviation were calculated for summarizing the performance in writing in both the control and experimental groups. An independent samples t-test was used for testing the difference in mean scores in the two groups in pre-test and post-test. A paired samples t-test was also used for examining the change in performance by comparison of pre-test and post-test scores of the control and experimental groups. The strength of the treatment was measured using Cohen's d as an index of effect size.

5.7 Ethical Considerations

The study was conducted in accordance with established ethical principles for educational research. Prior permission to conduct the research was obtained from the concerned authorities of Dr. M.G.R. Educational and Research Institute. All participants were informed about the purpose of the study, and their participation was entirely voluntary. Confidentiality and anonymity were maintained throughout the research process, and the data collected were used exclusively for academic and research purposes. Participants were assured that their responses would remain confidential and would not influence their academic evaluation.

6. Results

6.1 Pre-Test Comparison of Control and Experiment Group

To check for the equivalence of the participants at the start of the research, a pre-test was conducted on the control group and the experimental group prior to the application of SAM intervention. The pre-test examined the general academic writing skills of the participants. Independent Samples t-test was used to compare the pre-test scores of both groups to test if there were any significant differences between them at the start of the intervention.

Comparison of Pre-test Mean Scores of Control and Experimental Group

Group	N	Mean	SD
Control Group	35	23.14	3.18
Experimental Group	35	23.57	3.27

Independent Samples t-test	Value
<i>t</i>	0.56
<i>p</i>	0.577

Figure 1

Comparison of Pre-test Mean Scores of Control and Experimental Group

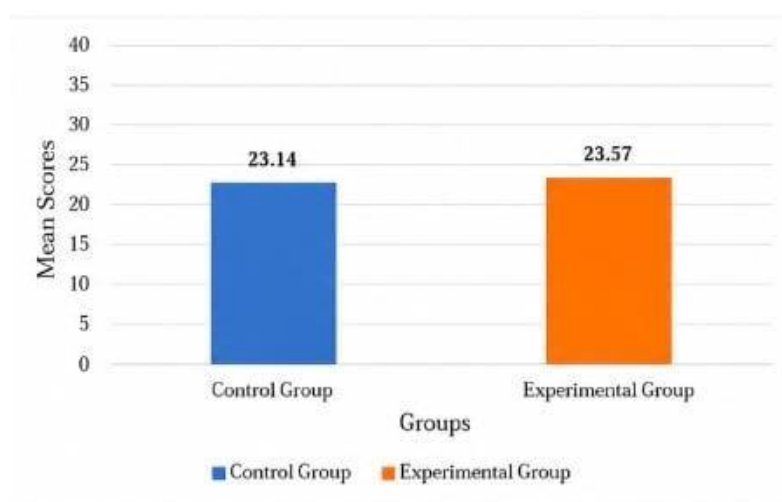


Table 1 and Figure 1 illustrate the comparison of the pre-test scores of the control and experimental groups before the introduction of SAM intervention. The control group had a mean score of 23.14 (SD = 3.18), whereas the experimental group had a mean score of 23.57 (SD = 3.27). The *t*-value calculated from Independent Samples *t*-test equals 0.56 and the corresponding *p*-value equals 0.577, which means that the difference between the groups was statistically insignificant ($p > .05$). These results demonstrate that both groups had a comparable level of competence in academic writing before the start of the intervention. Although the experimental group had a slightly higher mean score than the control group, this difference was statistically insignificant and therefore should not be taken into account. These results show that the initial equivalence of the groups was ensured, meaning that all

participants started the experiment being equally competent in academic writing. It is important for a quasi-experimental study to ensure the initial equivalence of the groups to increase the validity of comparisons. Therefore, any significant differences in the post-test results should be attributed to the intervention and not to any pre-existing differences in the groups.

6.2 Post -Test Comparison of Control and Experiment Group

Following the six weeks of instruction intervention, post-tests were conducted for both the experimental group and the control group in order to measure their performance in terms of writing. The reason why there is a need to conduct a comparison between the post-test scores is to find out whether there has been a statistically

significant difference in the performance of the experimental group due to the intervention.

Table 2

Group	N	Mean	SD
Control	35	28.43	3.41
Experimental	35	39.26	3.56

Independent Samples t-test	Value
<i>t</i>	13.04
<i>p</i>	< .001

Figure 2

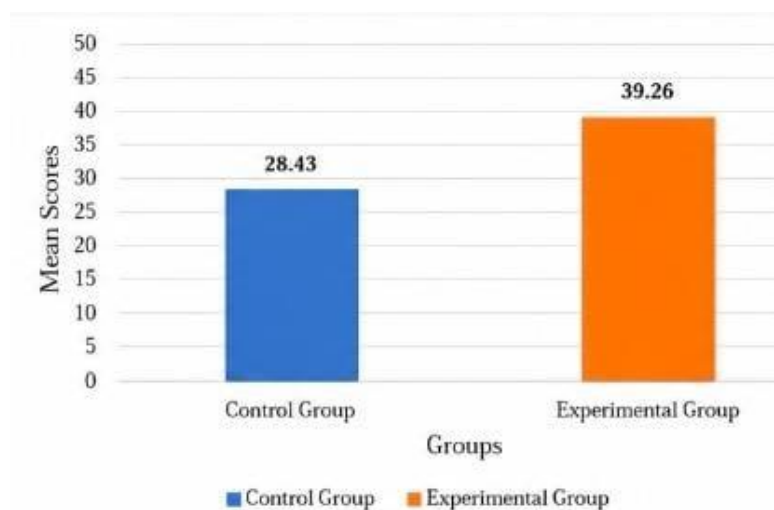


Table 2 and Figure 2 illustrate the results of the comparison of post-test scores between the control and experimental groups after completing the six weeks of intervention period. The mean score obtained by the control group is 28.43 (SD = 3.41), while the experimental group obtained a much higher mean score of 39.26 (SD = 3.56). The t-value resulting from the Independent Samples t-test was 13.04 with a p-value of < .001 showing high statistical significance between the two groups. The results indicate that students exposed to instruction using the Structured Argument Mapping approach were significantly better performers than those receiving traditional writing instruction. There was clear improvement in academic writing competency for the experimental

group, while there was moderate improvement for the control group during the same period of instruction. As the two groups were similar at the start of the experiment as indicated by the pre-test result, it can be reasonably assumed that the difference in the post-test result is due to the Structured Argument Mapping intervention. It can therefore be concluded that the systematic presentation of ideas prior to writing has played a significant role in improving the academic writing ability of students.

6.3 Comparison of Thesis Articulation

In order to analyze the impact of the SAM intervention on the first writing skill, which is thesis articulation, the results from pre-test and post-test in both control and experimental groups

were compared. The concept of thesis articulation means that students have skills for developing a well-formulated central idea in their academic

writings. A Paired Samples t-test was conducted to evaluate the progress of the groups after receiving the intervention.

Table 3

Group	Pre-test Mean	Post – test Mean	Mean Difference	<i>t</i>	<i>p</i>
Control	11.46	14.08	2.62	6.28	<.001
Experiment	11.61	19.34	7.73	18.91	<.001

Figure 3

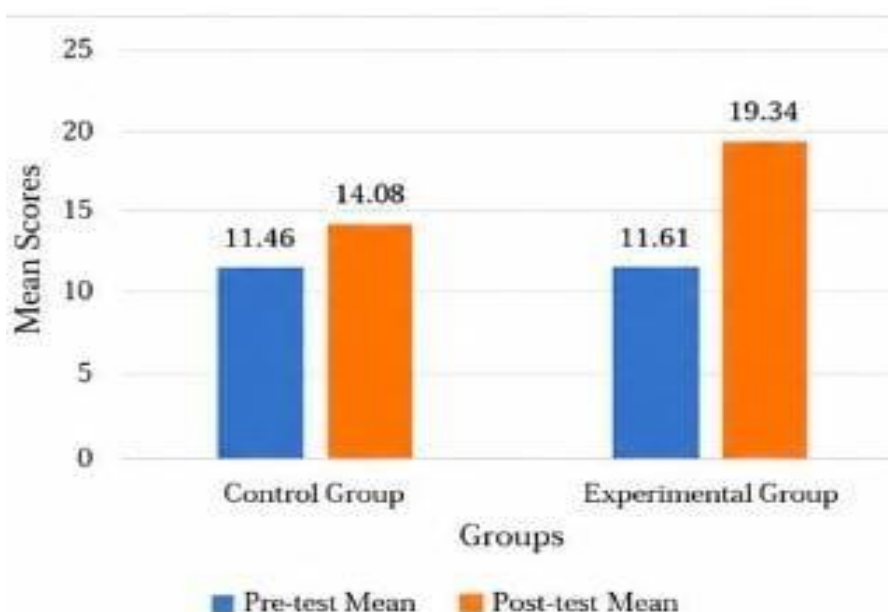


Table 3 and Figure 3 show the comparison of pre-test and post-test scores for Thesis Articulation between control and experimental groups. The control group achieved a mean score of 11.46 in the pre-test and 14.08 in the post-test, which indicates a mean gain of 2.62 points. As shown by the Paired Samples t-test, this gain was statistically significant ($t = 6.28$, $p < .001$). On the other hand, the experimental group made a significant increase from a mean pre-test score of 11.61 to a mean post-test score of 19.34 points, thereby gaining 7.73 points on average. This gain was found to be highly statistically significant ($t = 18.91$, $p < .001$).

Both groups made gains following the instruction, however, gains were much higher in the case of the experimental group. The gains made by the

students subjected to Structured Argument Mapping instruction were almost three times higher than those made by the control group. These results indicate that there was a much stronger improvement of students' skills related to formulating concise and clear thesis statements among those subjected to the instruction.

6.4 Comparison of Conceptual Expansion

In order to analyze the effectiveness of SAM intervention on the second component of writing, that is, Conceptual Expansion, pretest and posttest results of both the control and experimental groups were analyzed. Conceptual Expansion involves the development and elaboration of the main idea by using appropriate explanations and examples. In order to measure the gain in both

groups after the intervention, Paired Samples t-test was conducted.

Table 4

Group	Pre-test Mean	Post – test Mean	Mean Difference	<i>t</i>	<i>p</i>
Control	11.68	14.35	2.67	6.47	<.001
Experimental	11.96	19.92	7.96	19.43	<.001

Figure 4

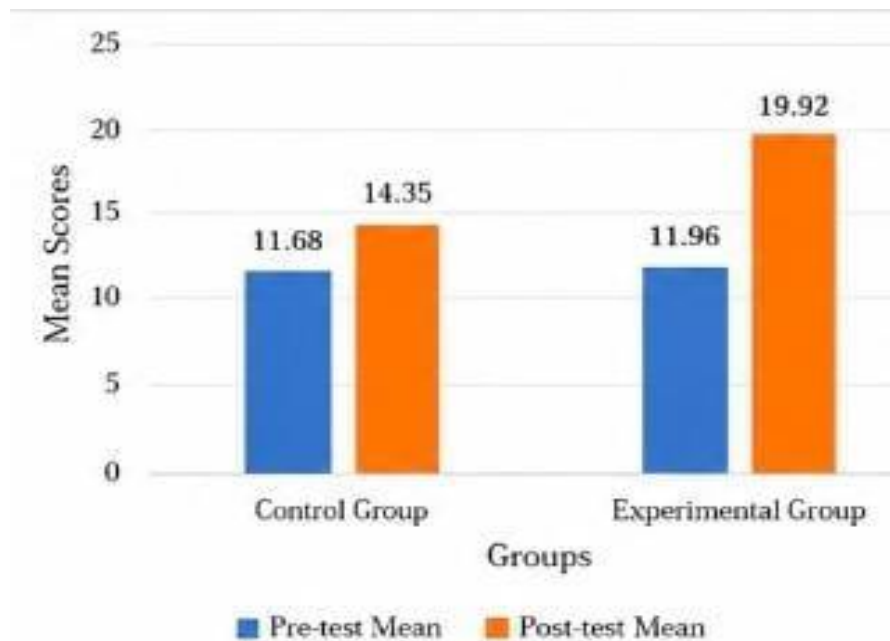


Table 4 and Figure 4 are the results of the comparison between the pre-test and post-test scores of Conceptual Expansion in the control group and the experimental group. An improvement in the mean score was noted for the control group, wherein the mean score rose from 11.68 in the pre-test to 14.35 in the post-test, resulting in a mean difference of 2.67 points. This improvement proved to be statistically significant ($t = 6.47$, $p < .001$). Similarly, the experimental group had a marked increase in the mean score from 11.96 in the pre-test to 19.92 in the post-test, indicating a mean increase of 7.96 points. This improvement also turned out to be statistically significant ($t = 19.43$, $p < .001$). From this comparison, it can be concluded that both the instructional strategies helped in developing the concept of Conceptual Expansion; however, the

improvement made by the experimental group was much higher as compared to the control group. The students learning through the use of the instructional strategy of Structured Argument Mapping showed better skills in elaborating their thoughts and providing relevant details along with logical flow in their academic writings.

6.5 Overall Difference and Improvement

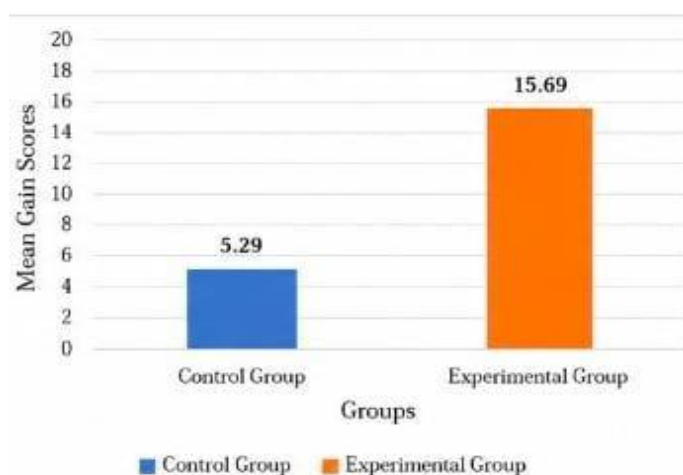
The performance of the SAM intervention in terms of effectiveness was established through the comparison of gain scores of the control group and the experimental group. The gain score was determined by finding the difference between the pre-test and post-test scores for each individual. This is an evaluation of the overall effectiveness of the intervention among both groups over a period of six weeks.

Table 5 Comparison of Over all gain Scores of the Control and Experiments Group

Group	Pre-test Mean	Post-test Mean	Gain Score	Cohen's d
Control	23.14	28.43	5.29	0.74
Experimental	23.57	39.26	15.69	2.41

Figure 5

Comparison of Over all gain Scores of the Control and Experiments Group



The overall improvements in academic writing skills accomplished by the control and experimental groups throughout the six-week teaching period are presented in Table 5 and Figure 5. In particular, the control group showed an improvement in their pre-test scores (mean = 23.14) to a post-test score (mean = 28.43), which yielded a total gain score of 5.29 points. The effect size (Cohen's $d = 0.74$) suggests a moderate instructional effect, indicating that traditional teaching of writing led to significant gains in writing performance of the learners. However, the experimental group exhibited much larger improvements since the mean score changed from 23.57 to 39.26 between the pre-test and post-test results. Therefore, the total gain score was 15.69 points. As can be seen from the results, the effect size (Cohen's $d = 2.41$) denotes a very large instructional effect. As can be seen from the above comparison, the experimental group has improved approximately three times more compared to the control group. These results prove that the effectiveness of the structured argument mapping

technique is much higher compared to traditional techniques in helping undergraduate students learning English as a second language to improve their academic writing skills. The gain scores and the effect size are extremely high.

7. Findings

The results of the current research indicate that there was a significantly positive effect of the Structured Argument Mapping (SAM) intervention on the academic writing skills of the ESL learners at Dr. M.G.R. Educational and Research Institute. The pre-test data indicate that there were no statistically significant differences between the control and experimental groups before the intervention, which indicates that both the groups had equal writing skills at the initial stage of the research. After the six-week intervention, the post-test results showed that the overall academic writing skills of the experimental group significantly improved in comparison to those of the control group, thus proving the effectiveness of SAM approach. The component-wise analysis also

indicates that the experimental group showed significantly higher scores in both Thesis Articulation and Conceptual Expansion in comparison to those of the control group. Students, who received SAM-based instruction, were able to generate more focused and clear thesis statements, logical organization and expansion of ideas and explanations. While the control group showed some improvement based on traditional teaching methods, the level of improvement was much greater in the experimental group. The analysis of gain scores and effect sizes provided additional evidence of the practical significance of the intervention since, in addition to improving writing skills, Structured Argument Mapping proved to be an important element in developing overall academic writing proficiency of ESL college students.

8. Discussion

Based on the findings in this paper, the Structured Argument Mapping (SAM) technique proved to be extremely useful for boosting the academic writing skills of ESL undergraduates. Although both control and experimental groups showed significant improvement during the instructional period, the improvement of the experimental group was far more pronounced. Thus, it can be argued that pre-writing structured organization of ideas had positive effect on the performance of students. In this regard, it should be stated that academic writing should not only involve the creation of grammatically correct sentences, but also logical planning and organization of ideas. Improvement in the area of Thesis Articulation proves the usefulness of SAM for the development of clear thesis statements. Since SAM involves the creation of visual representation of ideas, students can structure their thoughts in a proper way and thus create effective thesis statements. It is in agreement with the idea that Graff & Birkenstein (2014) put forward, namely, that the organization of ideas is critical for the creation of effective arguments.

Similarly, the significant improvement in **Conceptual Expansion** suggests that Structured Argument Mapping encouraged students to elaborate their ideas with appropriate explanations, supporting details, and logical

progression. By visually connecting the relationships among ideas, learners were able to develop more comprehensive and well-structured academic texts. This finding aligns with **Novak and Cañas (2008)**, who emphasize that visual mapping strategies facilitate meaningful learning by strengthening conceptual relationships and supporting deeper understanding.

Overall, the findings demonstrate that Structured Argument Mapping is an effective instructional strategy for improving academic writing among undergraduate ESL learners. The approach not only strengthened students' ability to formulate clear thesis statements but also enhanced their capacity to develop ideas systematically and logically. Therefore, integrating Structured Argument Mapping into undergraduate ESL writing instruction may provide teachers with a practical and pedagogically effective approach to fostering stronger academic writing skills.

9. Conclusion

The current study analyzed the efficiency of Structured Argument Mapping (SAM) in improving Thesis Articulation and Conceptual Expansion skills in undergraduate ESL learners of Dr. M.G.R. Educational and Research Institute. The outcomes show that students receiving training using Structured Argument Mapping approach proved to be significantly better in their academic writing skills compared to students receiving traditional writing lessons. Although both control and experimental groups showed some development following training, the experimental group managed to reach noticeably more significant levels of improvement in articulating thesis and extending ideas logically and coherently. Thus, the use of SAM helped students get a systematic plan of action before writing an essay that facilitated the process of creating a well-developed piece of academic writing. The ability to organize the structure of the argument helped the students articulate their main thoughts in a better way. The study emphasizes the pedagogic importance of Structured Argument Mapping as an innovative method of teaching undergraduate ESL writing classes. The use of Structured Argument Mapping encourages students to develop organized ways of thinking and structuring their ideas. Thus, using

this tool, it is possible to help ESL learners cope with the typical problems related to writing assignments.

10.Limitation and Future Scope

This study does have some limitations which need to be noted. First, this study is based on a relatively small number of ESL undergraduate students from the Dr. M.G.R. Educational and Research Institute and hence, may lack generalizability across other educational settings. Secondly, the treatment took place over the span of six weeks and focused on just two writing elements, that is, Thesis Articulation and Conceptual Expansion. Hence, the findings may not provide a complete representation of the impact of Structured Argument Mapping on other writing elements.

Future research could be done using larger and more diverse samples from different higher education institutes in order to increase generalizability of the results obtained from this research. Future research could further examine how effective is the use of Structured Argument Mapping on other writing elements such as coherence, lexical accuracy, argument quality, and critical thinking skills.

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