

Improving Students' Creative Writing Ability Through SCAMPER Technique

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Abstract—The acquisition of writing is considered one of the most fundamental targets of EFL learners. It is widely accepted that teaching and learning techniques are recognised as crucial factors contributing to learners' development of language skills. The SCAMPER is an effective technique for promoting learners' creative writing skills. The increasing number of learners of English as a foreign language has led to a number of intervention studies that have attempted to investigate the effect of the SCAMPER technique on the students' creative writing. A small number of studies have focused on the SCAMPER's influence on the EFL Iraqi university students' creative writing. Hence, the main aim of this study is to examine the impact of SCAMPER intervention on improving EFL Iraqi university students' creative writing. This study was a quantitative study which adopted the quasi-experimental design. Forty students were recruited. A pre-post writing test and a questionnaire were used to collect the data. This study showed that there is a statistically significant difference between the student's performance in favour of the post test. The students also showed a positive attitude toward using SCAMPER technique to develop their creative writing. Furthermore, there were no statistically significant differences between the two sexes in their creative writing performance in both pre and posttests.

Index Terms—creative writing, SCAMPER technique

I. INTRODUCTION

The knowledge of what is meant by SCAMPER technique is important for understanding its key role in the learning environment. The concept of SCAMPER is generally understood to mean the technique that is based upon the principle of how to generate and expand ideas for developing the learner's creative as well as the critical thinking (Idek, 2016; Al Qudah, 2018). In its widest sense, SCAMPER is a lateral thinking technique. More specifically, Glenn (1997) stated that SCAMPER is thought to be one of the effective techniques that are used for promoting creativity by means of the implementation of a series of practical systematic steps.

The acronym SCAMPER stands for a set of thinking operations to promote learners' thinking skills and to develop their creative imagination (Serrat, 2009): (S) Substitute, (C) Combine, (A) Adapt, (M) Modify, (P) Put to other use, (E) Eliminate and (R) Reverse.

It is widely accepted that SCAMPER technique is a scientific way by which students can investigate, generate multiple ideas, solve problems, brainstorm and apply what they have learned based upon their abilities of creative thinking and their self-learning skills (Serrat, 2017; Hamid et al., 2019). It can be said that the SCAMPER technique is effective across various fields. Education is not isolated from these fields since modern educational theories centre on the learners and how to motivate them so that positive outcomes can be achieved. SCAMPER technique is regarded, therefore, one of the active techniques that can be used by teachers in teaching English language skills. By integrating SCAMPER into English language teaching class, teachers can be able to create interactive lessons that involve engaging learners and fostering their creativity. Based on a review of the extant literature, it can be concluded that implementing this technique can significantly improve the learning experience as well as students' achievement.

Writing is a crucial domain of English language acquisition. It is an essential means of communication alongside the other language skills (speaking, listening, and reading). It is well documented that creativity plays a pivotal role in writing. According to Sapkota (2012), the learners should express and generate new as well as clear ideas, not only put thoughts from mind to paper in writing. In other words, the students need to be trained and use their creativity and imagination when they write.

Moreover, Radziszewski (2017) argued that students are challenged in generating multiple ideas in the educational setting. There are two possible reasons for this problem. Firstly, the students may rely heavily on teacher's approaches (Ab Majid & Ismail 2017; Pratiwi et al., 2019). Secondly, as might be expected, students' inability to create various thoughts and use their creative thinking and problem-solving skills. To promote the student's creativity and give opportunities to express their thoughts, opinions and views through writing; therefore, it is necessary to examine the effectiveness of SCAMPER technique as one the modern proposed strategies for teaching writing.

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II. LITERATURE REVIEW

Many studies have been conducted to examine the impact of SCAMPER technique. For instance, an intervention study carried out by AbuSaif and Maqabala (2017) aimed to examine the effective programme which is based on SCAMPER technique in order to promote creative writing skills in Arabic language. Forty-seven female Jordanian students at a high school participated in this study. They were split into an experimental group (N = 22) and a control group (N = 25). SCAMPER technique was used for teaching the experimental group, while the control group was taught by the traditional method. Prior to and after the instruction, students were assessed on creative writing skills. The results showed that the training programme has a positive impact on developing the experimental group's creative writing skills compared to the control group.

In a subsequent study by Sari and Mubaligh (2019) aimed to identify whether SCAMPER technique can facilitate the development of Arabic creative writing. This study was based on the Qualitative method that included data reduction, data display and conclusion drawing. The researchers adopted two steps to apply SCAMPER: first, lecture for explaining what is meant by SCAMPER technique. Secondly, lecture for preparing a topic or text. Then, the students asked to explore the text and create the new text by applying SCAMPER's steps. The researchers draw the conclusions that SCAMPER is beneficial for enhancing creative thinking.

Another study conducted by Sayed and Kothb (2020) investigated the effect of using SCAMPER technique on developing third-year English majors' creative writing skills at Minia University. This study adopted pre-test and post-test experimental group design (N = 90). The students were assessed on the creative writing skills. The findings showed that there was a statistically significant difference between the student's performance in favour of the post test.

In a similar vein, Alhamadi (2021) conducted a study with 30 Saudi high school female students studying in the third grade. The students were signed into two groups: control and experimental. They were assessed using a creative writing test two times (pre and post-test) in order to determine the effectiveness of SCAMPER intervention. The researcher also used a questionnaire to know students' attitude toward using SCAMPER technique for developing creative writing. The author draws the conclusion that there is a positive effect of SCAMPER technique on students' creative writing skill. In terms of the questionnaire, the results showed that students have a positive attitude toward using SCAMPER technique for enhancing their creative writing skills.

In a more recent study, Fuadah and Shodiq (2022) investigated the impact of the SCAMPER method in creative Arabic writing by online learning among Sudanin university students. The researchers adopted observation, interviews, questionnaires, tests and documentation for collecting comprehensive data on the learning process and achievement. The results of this study confirmed the conclusion drawn from the previous studies that showed the implementation of SCAMPER in online learning contributes to enhancing Arabic writing skills.

In short, the studies mentioned previously all support the notion that SCAMPER technique plays a crucial role in developing creative writing skills. By incorporating SCAMPER into the writing process, learners can also unlock their creative potential and produce innovative writing.

III. AIM OF THE STUDY

The main purpose of the study is to investigate the efficiency of using SCAMPER strategy on improving three stage Iraqi EFL students' creative writing skills at English Department - Basic Education College- Misan University. Moreover, this study attempts to investigate students' attitudes towards the SCAMPER technique in improving creative writing skills.

IV. QUESTIONS OF THE STUDY

This paper seeks to address the following questions:

1. *Does the SCAMPER technique have an impact on Iraqi EFL students' performance in creative writing skills?*
2. *What are Iraqi EFL students' attitudes towards using SCAMPER technique for enhancing their creative writing skills? And if there are significant differences between the students' attitudes and the gender?*
3. *Are there statistically significant differences in the students' performance in creative writing skills in terms of gender?*

V. METHODOLOGY OF THE STUDY

A. Participants and Research Context

The population of the study comprised students in the second stage at the English Department- Basic Education College- Misan University. From this population, 40 students (female: 20; male: 20) were recruited.

B. Research Design

This study was a quantitative which adopted pre-test post -test experimental group design or what is also called the quasi-experimental design. This research design was adopted because it aimed to examine the effect of the independent variable on the dependent variable and it is considered one of the appropriate approaches for learning environments

research.

The students were exposed to pre-post testing (Table 1). The intervention was based on using SCAMPER technique. This intervention continued for three weeks. The intervention was administered according to the plan prepared in advance.

TABLE 1
STUDY DESIGN

Group Type	Pre-test	Intervention	Post-test
Quasi- experimental	Creative writing skills	SCAMPER Technique	Creative writing skills

C. Data Collection

Two types of data collection instruments were used in this study. First, the tests: in order to determine the effectiveness of SCAMPER intervention, pre and post creative writing tests were administered. These tests comprised of two topics and the students were asked to select one topic and write a paragraph on it. Language Creativity Rating Scale was used as a rubric for evaluating students' level of performance in creative writing skills in the pre and posttests which was adopted from Majid et al. (2003). It covered the seven targeted creative writing skills namely; originality of ideas, fluency of ideas, flexibility of ideas, elaboration on initial ideas, richness of vocabulary, complexity of sentences and accuracy in grammar. The total score of the test is 35.

Secondly, the questionnaire to examine students' attitudes toward the SCAMPER technique in their writing lessons. It was adapted from Alhamadi (2021). It is consisted of seven items. The students were asked to choose one of five points scale Likert scale (1= strongly disagree, 2= disagree, 3= uncertain, 4= agree, 5= strongly agree). The purpose of the questionnaire was explained to the students.

VI. RESULTS OF THE STUDY

Results for Research Question 1: Does the SCAMPER technique have an impact on Iraqi EFL students' performance in creative writing skills?

To address this research question, One-Sample Test was conducted to compare the mean scores of pre and post of the treatment group in the creative writing skills. The presented results in Table 2 showed that the mean of the students' performance in pretest is (23.60), while in the post test is (27.40). Moreover, there are significant statistical differences ($p = 0.00$) between the mean scores of the performance of students in pre and posttests. It can be concluded that students' performance in the post is higher than in the pretest.

TABLE 2
DESCRIPTIVE STATISTICS AND SIGNIFICANT DIFFERENCES BETWEEN PRE AND POST SCORES OF THE EXPERIMENTAL GROUP IN CREATIVE WRITING

Test	N	Mean	Std. Deviation	95% Confidence Interval for Mean		df	t	Sig.
				Lower	Upper			
Pre	40	23.60	5.188	21.94	25.26	39	28.77	.00
Post	40	27.40	3.713	26.21	28.59	39	46.67	.00

Results for Research Question 2: What are Iraqi EFL students' attitudes towards using SCAMPER technique for enhancing their creative writing skills? And if there are significant differences between the students' attitudes and the gender?

The second research question concerned with Iraqi EFL students' attitudes towards using SCAMPER technique for enhancing their creative writing skills. To address this question, analysis of the questionnaire item-by-item was achieved (see Table 3). It can be concluded that most students believe that SCAMPER is a successful technique to enhance their creative writing skills (Q1: Mean: 1.7). Furthermore, they believed that SCAMPER helps them to focus on how to use a suitable vocabulary as well as how to use sentence structures correctly (Q4: Mean: 1.7). The SCAMPER technique also helps students know how to write good coherent paragraphs (Q5: Mean: 1.7).

In addition, the students thought that using SCAMPER in writing gave them a good opportunity for expressing their ideas clearly and how to organise them accurately (Q3: Mean: 1.6). While in question 6, the students agreed that they preferred their teacher's individual guidance (Mean: 1.6) which involved answering their questions and explaining new concepts.

In question 2, most students agreed that SCAMPER as well as group discussions assist them to generate new ideas which are different from those in their textbook (Mean: 1.4). From the students' point of view, using SCAMPER technique made writing paragraphs more exciting (Q6: Mean: 1.5). It can be concluded that the students showed a positive attitude toward using SCAMPER technique to develop their creative writing. Additionally, the chi-square analysis showed that there are no significant differences between all the questionnaire items and gender (see Table 3).

TABLE 3
RESPONSE FREQUENCIES FOR QUESTIONNAIRE ITEMS

Questions	Male					Female					Mean	Chi square	
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		Value	Sig.
Q1	8	10	1	1	0	9	8	2	1	0	1.7	0.61	0.89
Q2	11	7	2	0	0	12	8	0	0	0	1.4	2.1	0.34
Q3	10	10	0	0	0	8	8	3	1	0	1.6	4.4	0.21
Q4	10	9	1	0	0	6	12	1	1	0	1.7	2.4	0.48
Q5	10	9	1	0	0	8	8	2	2	0	1.7	2.6	0.45
Q6	8	10	2	0	0	13	7	0	0	0	1.5	3.7	0.15
Q7	7	12	1	0	0	10	8	2	0	0	1.6	1.6	0.43

Results for Research Question 3: Are there statistically significant differences in the students' performance in creative writing skills in terms of gender?

One-way ANOVA was run to determine whether there were significant differences in the means of the students' performance in creative writing skills in terms of gender. In the pretest, the results indicated that the means of the students' performance in creative writing skills did not differ significantly ($p=0.25$) in terms of the gender (see Table 4).

The outcome of the one-way ANOVA also showed that there was no significant difference ($p = 0.50$) between the means of students' performance in the post test of the creative writing skills for the gender (see Table 4).

TABLE 4
DESCRIPTIVE STATISTICS AND SIGNIFICANT DIFFERENCES BETWEEN PRE AND POST SCORES OF THE EXPERIMENTAL GROUP IN CREATIVE WRITING ACCORDING GENDER VARIABLE

Test	Gender	N	Mean	Std. Deviation	Sig.
Pre	Male	20	24.55	4.78	0.25
	Female	20	22.65	5.51	
Post	Male	20	27.80	3.69	0.50
	Female	20	27.00	3.78	

VII. DISCUSSION

The primary research question of this study is whether SCAMPER technique has an impact on Iraqi EFL students' performance in creative writing skills. To address this main research question which guided the study, quasi-experimental design was adopted. Forty Iraqi university students were recruited in this study. This part of the paper is devoted to discussing the findings which have emerged from the data.

The first research question examined the effectiveness of the SCAMPER technique to promote Iraqi EFL students' creative writing skills. The results of the One-Sample Test showed that the mean of the students' performance in the post test is better compared with pre-test. The findings also showed that there was a statistically significant difference between the student's performance in favour of the post test. In other words, SCAMPER technique has a positive impact on Iraqi EFL students' creative writing skills. Moreover, these results provide evidence in favour of the SCAMPER technique as an effective technique to enhance learners' creative writing skills.

In addition, these findings support those of AbuSaif and Maqabala (2017) who found that intervention based on SCAMPER technique was beneficial for developing students' creative writing skills. Moreover, similar results have been obtained by Alhamadi (2021) suggesting that students' creative writing skills have been improved after exposure to the SCAMPER treatment. These findings support those of Sayed and Kothb (2020), who found that treatment of SCAMPER technique has an influence on students' outcomes in creative writing skills. Furthermore, the findings here corroborate those found in Sari and Mubaligh's (2019) study which stated that teaching creative writing skills rely on SCAMPER can be used as an alternative way in learning writing skill. Similar results are found in the study that was done by Fuadah and Shodiq (2022) suggesting that SCAMPER plays a pivotal role in teaching creative Arabic writing. In conclusion, these results would seem to suggest that there is a positive influence of using SCAMPER technique on learners' creative writing skills.

The second research question sought to know the Iraqi EFL students' attitudes towards using SCAMPER technique for enhancing their creative writing skills and whether there are significant differences between the students' attitudes and the gender. It is clear from analysis of the questionnaire item-by-item that students have a positive attitude towards using the SCAMPER technique in developing their creative writing skills. These findings imply that SCAMPER is one of the significant techniques for creative writing development in EFL students. It is possible that these results can be accounted for by the variety of thinking operations that are included in SCAMPER which are, as mentioned previously, substitute, combine, adapt, modify, practice, eliminate and rearrange. More specifically, each one of these operations

stimulated EFL students' thinking skills. These findings support those of Alhamadi (2021), who found that students' answers to the questionnaire showed their positive attitudes towards the implemented SCAMPER technique.

The second research question also asked whether there are significant differences between gender and attitude towards using SCAMPER technique for enhancing their ability in creative writing. The findings of the chi-square analysis clearly confirm that there are no significant differences between all the questionnaire items and gender. It can be concluded that there was no significant effect of gender on the attitude towards using SCAMPER as a learning technique in developing the skills of creative writing. A possible explanation of this finding might lie in the truth that attitudes in general are psychological constructs that express an individual's opinions towards an object according to their knowledge. To illustrate further, attitudes are the evolution of an object from the individuals' point of view. Hence, it is crucial to determine the students' attitudes towards SCAMPER as a useful tool for stimulating ideas for guiding them correctly regardless of gender.

The final research question concerned the student's level of performance in creative writing skills in terms of gender. To answer this question, One-way ANOVA was performed and the results indicated that there were no statistically significant differences between the two sexes in their creative writing performance in both pre and posttests. These findings suggested that gender variable has no impact on the students' performance in creative writing skills before and after SCAMPER intervention. It is important to mention here that it is clear from the research reviewed that a little attention has been paid to examining the gender's influence on the learners' performance in creative writing skills so far. Consequently, further work could undertake in-depth investigation of this factor's effect.

VIII. CONCLUSION

This study aimed to examine the effectiveness of using the SCAMPER technique on the students' creative writing. Even though the effectiveness of using the SCAMPER technique has been widely investigated in relation to its crucial role in writing acquisition across different samples, little attention has been paid to the SCAMPER's influence on the EFL Iraqi university students' creative writing. Taken together, the findings of this study point to the paramount role of SCAMPER technique for promoting learners' creative writing skills. The study confirms previous findings and contributes additional evidence that suggests that SCAMPER technique has an impact on Iraqi EFL students' performance in creative writing skills. In addition, the study supports previous findings that reported there is a positive student's attitude toward using SCAMPER technique to develop their creative writing. A further important consequence of this study is that the gender variable has no impact on the students' performance in creative writing skills before and after SCAMPER intervention.

The findings of this study have a number of vital implications for educational practice and by these implications; educators and organizations can manage the optimum utilization of the SCAMPER technique. First, it is crucial for the specialists in the field of education to take into account certain factors that contribute to writing development in designing educational intervention programmers. Another important educational implication that can be drawn from this study is that in order to produce better learning outcomes in creative writing skills, it is recommended that teachers should be familiar with the specific techniques that are used in the writing process. Hence, educational training programmers for teachers may be required in this respect in order to adopt effective and appropriate pedagogical approaches. Such studies would provide information regarding the impact of SCAMPER as a promising technique on creative writing skills development. Further investigation into the impact of SCAMPER is strongly recommended. A number of possible future studies using this technique are apparent. It would be interesting to assess the effects of this technique on other skills of language, such as speaking and reading.

The limitations of the study offer a number of potential directions for future research. First, the study only examined the effectiveness of SCAMPER technique through pre and posttest data, without taking account to the long-term effects or other measures of language learning. Therefore, an empirical longitudinal study based on making comparisons over time for the same cohort could be very useful following the students' performance. Another limitation is the small number of participants in the study, which may affect the generalizability of the findings. Finally, the study focused on EFL students at a university which may limit the applicability of the findings to other contexts. Such studies would provide information regarding the potential impact of SCAMPER technique in the educational process.

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REFERENCES

- [1] Ab Majid, M. R. B., & Ismail, Z. (2017). Kreativiti Pengajaran Guru Bahasa Arab Di Malaysia. *JuPiDi: Jurnal Kepimpinan Pendidikan*, 4(4), 27-38. Retrieved March 22, 2021, from <https://jupidi.um.edu.my/article/view/8471>
- [2] Abu Saif, A. and Muqabala, N. (2017). The Effect of Using Scamper Strategy on Improving Jordanian Female Tenth Grade Students' Creative Writing Skills. *Journal of the Islamic University for Educational and Psychological Studies*, 25(3), 289-306.

- [3] Alhamadi, S. (2021). The Effect of Social Constructivist Scamper Model on Creative Writing Skill. *International Journal of Linguistics*, 13(1), 10-25. Retrieved May 25, 2021, from <https://doi.org/10.5296/ijl.v13i1.17881>
- [4] Al Qudah, F. (2018). The Effectiveness of Using Generate Ideas (SCAMPER) on Improving Ninth Grade Students Writing Skill a Wadi El Sir School in Jordan, *Journal Education and Practice*, 25(9), 52-58. Retrieved April 13, 2022, from <https://iiste.org/Journals/index.php/JEP/article/view/44449>
- [5] Fuadah, S., and Shodiq, M.J. (2022). Kitābah Online Learning Strategy with the Scamper Method. *Izdihar: Journal of Arabic Language Teaching, Linguistics, and Literature*, 5(1), 59-74. Retrieved September 2023, from <https://doi.org/10.22219/jiz.v5i1.18999>
- [6] Glenn, R. E. (1997). SCAMPER for Student Creativity. *The Education Digest*, 62(6), 67-68.
- [7] Hamid, H. A., Idris, N., & Tapsir, R. (2013). The Functions of Graphics and Visual Reasoning Demand in Mathematical Problems in the Malaysian National Examination. *International Journal of Assessment and Evaluation in Education*, 3, 31-45. Retrieved June 15, 2022, from <https://ejournal.upsi.edu.my/index.php/AJATeL/article/view/1944>
- [8] Idek, M. (2016). Measuring the application of SCAMPER technique in facilitating creative and critical thinking in composing short stories and poems. *Malaysian Journal of Higher Order Thinking Skills in Education*, 2, 30-53. Retrieved April 10 2022, from <https://www.academia.edu/29038230/>
- [9] Majid, D. A., Tan, A. G., & Soh, K. C. (2003). Enhancing children's creativity: An exploratory study on using the Internet and SCAMPER as creative writing tools. *Korean Journal of Thinking and Problem Solving*, 13(2), 67-82.
- [10] Pratiwi, L. A., Dwijanto, D., & Wijayanti, K. (2019). Analisis Kemampuan Berpikir Kreatif Matematis pada Pembelajaran Read, Think, Talk, Write Ditinjau dari Kecemasan Matematika. In PRISMA, *Prosiding Seminar Nasional Matematika*, 2, 576-582.
- [11] Radziszewski, E. (2017). SCAMPER and Creative Problem Solving in Political Science: Insights from Classroom Observation. *Journal of Political Science Education*, 13(3), 308-316. Retrieved April 12 2022, from <https://doi.org/10.1080/15512169.2017.1334562>
- [12] Sapkota, A. (2012). Developing Students' Writing Skill Through Peer and Teacher Correction: An Action Research. *Nepal English Language Teachers' Association*, 17(1-2), 70-82. Retrieved March 11, 2022, from <https://doi.org/10.3126/nelta.v17i1-2.8094>
- [13] Sari, R.R. and Mubaligh, A. (2019). Scamper Sebagai Strategi Menulis Kreatif Bahasa Arab Abad 21. *Arabi: Journal of Arabic Studies*, 4(2), 178-187. Retrieved March 10 ,2022, from <http://dx.doi.org/10.24865/ajas.v4i2.182>
- [14] Sayed, A.S.M. and Kotb, K.I. (2020). Using SCAMPER Strategy for Developing Third Year English Majors' Creative Writing Skills. *Journal of Modern Research*, 2(2), 97-104. Retrieved April 1, 2022, from <https://dx.doi.org/10.21608/jmr.2020.23851.1019>
- [15] Serret, O. (2009). The SCAMPER Technique. *International publications*, Cornell University ILR School: New York. Retrieved March 13, 2022, from <https://hdl.handle.net/1813/87753>
- [16] Serrat, O. (2017). The SCAMPER Technique. In *Knowledge Solutions*. Springer: Singapore. Retrieved April 7, 2022, from https://link.springer.com/chapter/10.1007/978-981-10-0983-9_33



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