

# The Effect of a Teaching Strategy Based on Synectics and Lateral Thinking on Developing Creative Writing Skills and Linguistic Fluency among Arabic Students

Dr. Alaa Abdulkhaleq Hussein<sup>1\*</sup>

<sup>1\*</sup>Baghdad University, College of Islamic Sciences, Baghdad, Iraq

E-mail: [1alaa.abdulkhaleq@colaw.uobaghdad.edu.iq](mailto:1alaa.abdulkhaleq@colaw.uobaghdad.edu.iq)

ORCID: <https://orcid.org/0009-0006-9380-6952>

(Received 15 December 2025; Revised 22 January 2026, Accepted 04 February 2026; Available online 27 February 2026)

**Abstract** - One of the major goals of Arabic language education is the development of creative writing and linguistic fluency, but conventional methods of teaching do not always contribute to the higher-order thinking and creative expression in the university level. The paper will discuss the usefulness of an instructional plan that combines Synectics and lateral thinking to improve performance in creative writing and linguistic fluency in Arabic language students studying undergraduate courses at the College of Islamic Sciences, University of Baghdad. A research design that was applied in the second semester of the 2024/2025 academic year is the experimental research design. A total of 90 third-year students were used as a sample; half of them were in an experimental group and the other half was in a control group. The experimental group was taught with the help of the activities based on Synectics and lateral thinking, and the control group was taught with the help of the traditional one. The information was gathered through the creative writing test which measures originality, flexibility and fluency as well as a linguistic fluency scale comprising of 20 sub-skills. The independent samples t-tests and effect size measures analyzed post-test data. The findings show that, there are statistically significant differences that favor the experimental group in both, linguistic fluency ( $t = 26.385$ ,  $p < 0.05$ ) and the performance in creative writing ( $t = 10.971$ ,  $p < 0.05$ ). The analysis of the effect size indicated high instructional effects as Eta-squared of 0.549 in linguistic fluency and 0.796 in creative writing are significant. The results of these studies prove that the combination of Synectics and lateral thinking promotes cognitive flexibility, originality and fluent language production. The research comes to a conclusion that instructional approaches that are based on creativity can significantly enhance the outcomes of teaching Arabic language in tertiary institutions and justify their implementation in the language courses of university curricula and teacher preparation.

**Keywords:** Synectics Strategy, Cognitive Flexibility, Lateral Thinking, Linguistic Fluency, Creativity Measurement, Pedagogical Intervention

## I. INTRODUCTION

The blistering technological progress and the increased rate of knowledge share have transformed the modern educational priorities and put more emphasis on the abilities of higher-order thinking, creativity, and cognitive flexibility. It is thus anticipated that the education systems of today will abandon the past system of content transmission and embrace teaching

methods that engage learners in the aspects of analysis, innovation, and problem solving (Kim et al., 2019). The studies show that these types of competencies cannot be built by the system of memorizing but with the help of the pedagogical practices that facilitate the reflection and creative thinking (Al-Mastrihi, 2021; Hammouda & Abu Jarad, 2020).

This change has transformed the role of the instructor to a transmitter of knowledge to a learner-focused modernist who creates learner centered environmental conditions that advance intellectual enquiry. Lateral thinking is one of the thinking skills that come with creativity that is important in allowing learners to restructure information, oppose dominant ideas and come up with alternative solutions (Gibson, 1992; Mustofa & Hidayah, 2020). Compared to linear reasoning lateral thinking enhances flexibility and originality and can be explicitly trained with the use of a teaching strategy like brainstorming and assumption-challenging tasks (Mustofa & Hidayah, 2020). Very near the lateral thinking approach is the Synectics strategy a form of instruction centered on creativity based on analogy and metaphor to draw a relationship between seemingly unrelated ideas (Mansour & Alziq, 2025; Maroofi & Moludi, 2015). Synectics encourages creative thinking since it allows students to look at issues in new ways and develop creative solutions. Such strategies can be especially helpful in language education, where creativity is implemented through linguistic practice, and not mechanical language use (Hussien, 2018; Vigna et al., 2022).

Creative writing is a higher branch of linguistic competence that incorporates originality, coherence, imagination and accuracy (Alshuaifan, 2024; Al-Barakat et al., 2025). The ability to analyze and communicate ideas fluently and without any disruptions is known as linguistic fluency that is a fundamental part of successful creative writing (Al-Zoubi, 2024). Research has proved that linguistic fluency is intricately connected to cognitive flexibility and creative thinking and provides learners with the ability to broaden thoughts and diversify language usage in different contexts (Hussien, 2018; Mekheimer, 2011). Although there is more external focus on creativity-based instructional methods,

there are still problems with acquiring creative writing skills and linguistic fluency among undergraduate students in Arabic language departments. This can be greatly explained by the fact that traditional teaching methods still prevail in the teaching of grammar which emphasizes on the expression of rules rather than the expression of creativity. In addition, the integration of Synectics method and the lateral thinking technique has not been well studied in the fields of higher education, especially in Colleges of Islamic Sciences in Iraq (Chen et al., 2025; Majeed & Hussein, 2022).

### *Research Objectives*

The purpose of the research will be to explore the role of Synectics and lateral thinking strategy in helping to develop creative writing and language fluency among the undergraduate Arabic language learners. It also aims at suggesting an instructional paradigm on the basis of these strategies to be applied in other comparable situations in higher learning settings.

### *Research Hypotheses*

The experimental and control groups do not differ statistically significantly in the mean scores of linguistic fluencies at the level of 0.05. The difference in the average scores of experimental and control groups is not significant at the level of 0.05 in terms of creative writing skills (Almutairi, 2022; Campbell, 1987).

### *Research Limits*

The sample is restricted to undergraduate students of the third year of the Arabic language course at the College of Islamic Sciences at the University of Baghdad, in the second semester of the 2024/2025 academic year, and is aimed at the professional skills of creative writing and the language fluency.

The research paper will add to the body of literature on Arabic language education as it empirically examines the interaction of Synectics and lateral thought strategy on creative writing and linguistic fluency among undergraduate learners, which has not been researched extensively. It also offers an educational model which could guide curriculum implementation and educator training courses whose objective was to develop higher order language abilities. The paper has been divided into five parts including theoretical background and past research, methodology, findings, discussion, and conclusion with recommendation.

### *Theoretical Background and Related Work:*

#### *Synectics Strategy*

Synectics is a creative method of teaching that aims at coming up with creative solutions by forming bridges between seemingly unrelated concepts using metaphor, analogy and symbolic reasoning. Generally, it is explained as a learner focused process that involves bringing imaginative association and practical problem solving through association

of familiar concepts with the unfamiliar situations (Maroofi & Moludi, 2015). The creativity is conceptualized through the approach as a deliberate aspect of thought that is facilitated by particular mental states instead of being inspired or judging products spontaneously (Kim et al., 2019). There are two fundamental principles underlying the Synectics strategy. The first principle is to familiarize the unknown with the known since learners would understand complex or unfamiliar issues through analysis of the comparatively unknown with familiar ones (Gibson, 1992). This principle is implemented in a combination of a sequence of formatted steps, such as identifying a problem, making direct and personal analogy, finding similarities and differences, re-evaluating the problem and generalizing lessons learned (Maroofi & Moludi, 2015). The second principle is geared towards making the already familiar new so that the learners can reexamine familiar ideas in new ways. This mental detachment promotes innovative thinking and development of new solutions (Mansour & Alziq, 2025).

#### *Lateral Thinking*

Lateral thinking is a conscious form of thought that is contrary to the mainstream vertical thinking that is based on logic. It focuses on the re-arrangement of information, search of other perspectives and production of unusual solutions to the issues (Mustofa & Hidayah, 2020). Lateral thinking was initially proposed by Edward de Bono, but it can be trained in an orderly manner by educators in the form of assumption questioning, delaying judgment, and brainstorming (Gibson, 1992; Mustofa & Hidayah, 2020). Instead of giving up logic, lateral thinking seeks to bend it in new unexplored directions that upset the rigidity in thought and promote the diversification of ideas (Gibson, 1992). The key dimensions of the lateral thinking are defined as finding the prevailing ideas, finding alternative ways, decreasing cognitive rigidity, and using random stimuli to initiate the creative way of thinking (Mustofa & Hidayah, 2020). The empirical evidence indicates that lateral thinking has a major influence toward bettering creative and problem-solving skills in educational fields (Kim et al., 2019).

#### *Creative Writing Skill*

Writing is a basic linguistic ability, which is achieved by practicing constantly, whereas creative writing is a more advanced type of writing that involves originality, imagination, coherence, and the use of confident language (Al-Sharawy, 2024). Creative writing is an intricate cognitive process that entails interpretation, reconstruction and generation of ideas that are new and original (Mohamed Jaber Mohamed El Tayeb et al., 2024). The main creative writing skills would be the generation and arrangement of ideas, cohesiveness, the use of the right vocabulary and structure, and the figurative language use (Alshuaifan, 2024; Al-Barakat et al., 2025). In particular, originality will demonstrate the skills of the learner to produce unusual answers and new associations that reveal personal creativity (Kim et al., 2019).

### *Linguistic Fluency*

The ability to come up with ideas promptly and articulate them effortlessly, precisely and fluently is what defines linguistic fluency. Fluency in creative writing is evidenced by coherence of expression, flow of thoughts, and linguistic enough depiction of the meaning (Al-Zoubi, 2024). Linguistic fluency and cognitive flexibility and creative thinking are intertwined because the flexible learners have the ability to come up with several ideas and modify how they use their language based on the communicative situation (Hussien, 2018; Mekheimer, 2011). The different types of linguistic fluency including ideational, verbal, expressive, and elaborative fluency are the different dimensions of language production and performance (Mohamed Jaber Mohamed El Tayeb et al., 2024; Al-Zoubi, 2024).

### *Iraqi Studies*

Mashkour & Hamoudy, 2022 studied the subject of lateral thinking among undergraduate students of the College of Physical Education and Sports Sciences, Diyala University, and at the end reached moderate levels, depending on curriculum design and evaluation methods. The research suggested the implementation of teaching strategies to advance the ability of creative thinking. (Mohamed Jaber Mohamed El Tayeb et al., 2024) studied the relationship between creative writing and scientific thinking among postgraduate students of Arabic language and found a level of acceptable performance and a good positive relationship between the two variables. (Mekheimer, 2011) previously examined how the Synectics strategy measures the impact on expressive performance and innovative thinking in literature students and found that there was a statistically significant better result in the experimental group.

### *Arab Studies*

Al-Sharawy, 2024 investigated the success of an instructional intervention grounded on successful intelligence theory in building linguistic fluency in preparatory-stage students and found statistically significant improvement in experimental group. (Mansour & Alziq, 2025) evaluated the effectiveness of a training course based on the concept of Synectics on the reflective thinking and reported significant cognitive benefits in the subjects who participated. Further research established that instructional programs within the creative and holistic teaching methods play a significant role in the acquisition of creative and functional writing skills (Al-Barakat et al., 2025).

### *Foreign Studies*

A study by (Mustofa & Hidayah, 2020) on the effect problem-based learning has on lateral thinking ability showed that there was an enhancement in the lateral thinking capacity of students whose problem-based learning was found to be of high quality in the ability to develop a later idea and minimize narrow-minded thinking. (Maroofi & Moludi, 2015) tested the effectiveness of the teaching process

of Synectics in the development of the creativity in primary school children and discovered significant statistical improvement in creative performance. Likewise, (Kim et al., 2019) established that creative problem-solving programs have useful positive effects on the development of creativity under various educational settings.

### *Balancing the Current Study with Previous Studies*

The analysis of the past literature shows that the majority of the previous research investigated Synectics and lateral thinking techniques separately and mostly on the pre-university level of education. Conversely, the current research is related to the joint implementation of Synectics and the subsequent strategies of lateral thinking to increase the creative writing and the linguistic fluency among the undergraduate Arabic language learners in the Colleges of Islamic Sciences in Iraq. Moreover, this research expands on the past studies by use of advanced methodological processes, setting and context-specific research tools, and stricter data analysis tools.

## **II. RESEARCH METHODOLOGY AND PROCEDURES**

First: Research Method: The experimental method involves controlling the studied phenomena and the factors that affect them. The research problem and its influencing factors are identified, and solutions and causes are investigated through conducting an experiment to reach a resolution. The current study followed the experimental method with two groups: an experimental group and a control group, using pre- and post-tests. The control group was taught using traditional teaching methods, while the experimental group was instructed using the proposed strategy-based learning approach.

### *Dataset Description*

The data to be used in this paper was collected through a controlled educational experiment in the second semester of the academic year 2024/2025 of the University of Baghdad, College of Islamic Sciences. The sample size of the study was 90 undergraduate students in the third year who were studying at the Arabic Language Department. They were split into two equal groups an experimental group (n = 45), and control group (n = 45). The establishment of group equivalence was done before the intervention based on Raven Progressive Matrices to balance out the differences in intelligence.

In the experiment, the teaching strategy was used with the Synectics and lateral thinking on the instruction of the experimental group and the traditional instructional methods were used in instructing the control group. Two primary tools have been utilized in gathering data:

a Creative Writing Test, which determines originality, flexibility and fluency.

a Linguistic Fluency Scale, the scale comprised of 20 sub-skills to evaluate expressive and structural language competence.

The two instruments were given either as post-tests after the instructional intervention, and their validity and reliability were established before the final data analysis.

TABLE I DATASET DESCRIPTION

Variable	Description
Institutional context	University of Baghdad, College of Islamic Sciences
Academic Level	Third-year undergraduate students
Department	Arabic Language Department
Sample Size	90 students
Group allocation	45 students in the experimental group ((Synectics and lateral thinking strategy) and 45 students in control group (traditional instruction)
Research Design	Experimental design with control and experimental groups
Data Collection Period	Second semester of the 2024–2025 academic year
Assessment tools	Creative Writing Test and Linguistic Fluency Scale
Creative Writing dimensions	Originality, flexibility, fluency
Linguistic Fluency Constructs	Expressive and structural language skills
Test Duration	55 minutes
Statistical analysis	Independent samples t-test and Eta-squared effect size

TABLE I summarizes the main characteristics of the dataset, including sample composition, instructional conditions, assessment instruments, and measured constructs

**Second: Research Community and Sample:** The research community consisted of third-year preparatory students in schools affiliated with the Directorate of Education in Baghdad. Two groups were selected, totaling 90 students from the Arabic Language Department, third stage, at the University of Baghdad: a control group and an experimental group (45 students in Class A for the control group and 45 students in Class B for the experimental group). The experimental group underwent the study and was taught by using the proposed strategy, while the control group was taught by using traditional methods. Both groups were of the same age and had equivalent intelligence levels, which the researchers ensured by matching the groups according to IQ scores using Raven’s Progressive Matrices, a standardized test suitable for the Iraqi environment.

The results of TABLE II indicate that there are no statistically significant differences at the 0.05 level in the IQ test,

demonstrating the equivalence of the two groups in terms of intelligence.

TABLE II MEAN, STANDARD DEVIATION, AND “T” VALUE FOR CONTROL AND EXPERIMENTAL GROUPS IN IQ SCORES

Group	No. of sample	Arithmetic mean	Standard deviation	T-value	Significance
Control	45	35.8	6.32	0.46	Non-Sig.
Experimental	45	34.9	4.8		

*Research Instruments*

Based on the theoretical literature and a review of previous studies, a creative writing test was prepared. The test consists of essay questions covering three main skills, measuring originality, flexibility, and fluency. The test was initially applied to an exploratory sample of 25 students outside the study sample, following Bloom’s taxonomy and considering the levels of remembering, understanding, applying, analyzing, and synthesizing. Students who scored less than 20% were excluded.

*Determining the Appropriate Test Duration*

The suitable duration for the test was calculated by dividing the total response time for a question by the total number of students. The average time for completing all test items was found to be 55 minutes.

*A. Validity and Reliability*

To ensure the validity and reliability of the test, it was applied to an exploratory sample of 25 students outside the study sample.

**Face Validity:** The test was presented to a number of experienced faculty members to verify the clarity of the language, ensure the statements were unambiguous, and confirm the correctness of the wording. All feedback from the reviewers was taken into account.

**Consistency Validity:** Pearson’s correlation coefficient was used to measure the relationship between each question’s score and the total test score by applying the test to the exploratory sample.

TABLE III CORRELATION COEFFICIENTS AMONG TEST DOMAINS AND THE TOTAL SCORE

Scale Dimensions	Correlation Coefficient	Sig. value
Fluency	**0.71	0.00
Flexibility	**0.65	0.00
Originality	**0.77	0.00

Significant at 0.01; \* Significant at 0.05

It is evident from TABLE III that the correlation coefficients of the test are statistically significant, indicating the validity of the instrument.

**B. Test Reliability:** The reliability coefficient was calculated using Cronbach’s alpha, which yielded a value of 0.756. This high reliability coefficient indicates that the test is stable and consistent.

**Linguistic Fluency:** A scale was prepared to measure linguistic fluency among third-stage Arabic Language students at the College of Islamic Sciences. The scale focuses on the main skill of linguistic fluency and includes 20 sub-skills. The items were formulated to reflect these sub-skills, with scores assigned according to a three-point scale.

The scale was constructed as follows:

- Instructions were written, including personal information.
- Items were designed to align with linguistic skills.
- Each item had two options (Available / Not Available), corresponding to a score of 1 or 0, ensuring consistency with the test scoring.
- Face validity was verified by presenting the scale to a group of experts and specialists in Arabic language, curricula, and teaching methods. The feedback confirmed that all items effectively measure what they were intended to assess, demonstrating a strong link to linguistic fluency.

**Consistency Validity:** The Pearson correlation coefficient was calculated between each sub-skill and the total score of the main skill. The correlation coefficients ranged between 0.568 and 0.769, indicating that all coefficients are high and statistically significant at 0.05. This demonstrates a high degree of validity for the observation checklist.

**Reliability Coefficient:** The reliability of the scale was confirmed by reapplying it to the same pilot sample. Cronbach’s alpha was calculated and yielded a value of 0.756, indicating a high level of reliability for the scale.

### III. CONCLUSIONS, RECOMMENDATIONS, AND SUGGESTIONS

**Testing the First Hypothesis:** There are statistically significant differences at the 0.05 level between the mean scores of the experimental group students in the Arabic language fluency test and the mean scores of the control group students in the post-implementation of the proposed strategy. To test this hypothesis, the arithmetic means and standard deviations of the experimental and control groups’ scores in the Arabic language fluency test were calculated after applying the teaching strategy. Then, the (t) value was computed to determine the significance of differences in students’ achievement in Arabic. The following table illustrates this:

TABLE IV MEANS AND STANDARD DEVIATIONS OF THE CONTROL AND EXPERIMENTAL GROUPS’ SCORES IN LINGUISTIC FLUENCY AFTER IMPLEMENTING THE EXPERIMENT

Group	No. of sample	Arithmetic mean	Standard deviation	T-value	Significance
Control	45	21.55	2.34	26.385	Sig.
Experimental	45	36.325	2.85		

It is clear in TABLE IV that the average score of the students of the experimental group in linguistic fluency was 36.325 and the standard deviation was 2.85, and the arithmetic mean score of the control group students was 21.55 and the standard deviation was 2.34. This shows the existence of the differences in the mean scores of the control and experimental groups in linguistic fluency. These variations are in favour of experimental group, which was trained with the help of the proposed strategy, in contrast with control group, which was trained with the help of the traditional method. Independent T-test was carried out to establish the importance of difference between the two groups. The t-value obtained in the test was 26.385 with a significance level of above 0.05 which indicated that these were statistically significant differences. This is able to show that there exist significant differences in the mean scores of the experimental and the control groups in support of the experimental group that were taught through the proposed strategy.

This can be explained as following: The plan contributed to developing creative thinking as it helped to establish the connection between unrelated ideas, expand the linguistic boundaries of students and make them better express themselves. Moreover, the aspect of lateral thinking made students find alternative ways to solve problems and this enhanced their eloquence. Students feel free to talk when they manage to express their ideas in a proper way and this confidence increases their self-confidence and helps to use different vocabularies, to use diverse linguistic structure. In reference to the second hypothesis, statistically significant differences of the level 0.05 are identified between the mean scores of the experimental group in the creative writing test in Arabic and the mean scores of the control group in the post-application of the proposed strategy. In order to test this hypothesis, the means and standard deviations of the experimental and control group in the creative writing test were calculated after making the teaching strategy intervention and the T-value was calculated to ascertain the significance of the variation in the achievement of the students in Arabic. The obtained results are outlined in the table below:

As can be seen in TABLE V, the arithmetic mean of the score of the experimental group in creative writing was 43.28 and the standard deviation was 3.08 and the arithmetic mean of the control group was 31.475 and the standard deviation was 6.78. This means that there are variations in the means of the creative writing between the control group and the experimental group. Such distinctions are beneficial to the

experimental group that was instructed through the proposed strategy as opposed to the control group that was instructed through the traditional methods.

TABLE V MEANS AND STANDARD DEVIATIONS OF THE CONTROL AND EXPERIMENTAL GROUPS IN CREATIVE WRITING SKILL AFTER THE EXPERIMENT

Group	No. of sample	Arithmetic mean	Standard deviation	T-value	Significance
Control	45	31.475	6.78	10.971	Sig.
Experimental	45	43.28	3.08		

This could be described in the following way: Higher speed of idea generation: The Synectics strategy enables students to develop more ideas at a faster rate, which increases their fluency and ability to generate continuous texts and enrich their vocabulary. Lateral thinking enables them to draw on nonstandard words and structures broadening and deepening their writing. It is also through such strategies that the instructional framework results in writing confidence, alleviates anxiety, and helps in writing longer and more coherent writings.

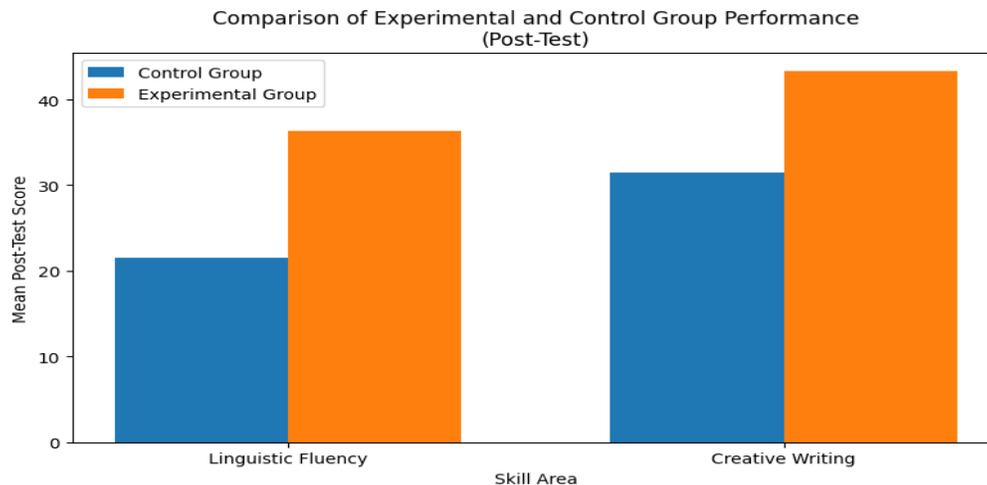


Fig. 1 Comparison of Experimental and Control Group Performance in Linguistic Fluency and Creative Writing (Post-Test)

Fig 1 presents a comparative bar chart of post-test mean scores for the experimental and control groups in linguistic fluency and creative writing. The experimental group demonstrates substantially higher performance in both outcomes, visually reinforcing the statistically significant differences reported in TABLE IV and V.

**Flexibility:** Students are enabled by lateral thinking to meticulously view subjects from different aspects, whereby can adapt own style to the situational context. The same idea in varying ways can perfectly be expressed by them, with demonstration of a good hand at playing around with words and pairing lateral thinking with Synectics, thus coming up with eloquent and well-formed sentences.

**Originality:** The emphasis on lateral thinking to some extent breaks the classic form of writing, generating new and unique ideas, which are not borrowed in a classic work. Students will be more prepared to take up the innovative narrative strategies, which are the abrupt plots, time playing, and unusual use of the figurative devices. The promotion of non-standard thinking enhances their capacity to come up with texts that represent their personality and style. In order to establish the level of importance of the differences between the two groups, the independent samples T-test was performed. The outcome of the test revealed that  $T = 10.971$  at a significance level of more than 0.05 was significant, which is to say that the differences are statistically significant. This corroborates the fact that the experimental

group who were taught through the proposed strategy performed better in creative writing than the control group. This illustrates the effect of implementing such a strategy in the development of creative writing among the students who were to be a part of experimental group.

The Eta-squared coefficient was calculated as shown in TABLE VI:

TABLE VI EFFECT SIZE MEASURES FOR LINGUISTIC FLUENCY AND CREATIVE WRITING OUTCOMES

	Eta coefficient	Eta-square
Linguistic fluency	0.741	0.549
Creative writing	0.892	0.796

It is evident from TABLE VI that the Eta-squared values exceed 0.14, indicating a significant effect of using the Synectics and lateral thinking strategy on the experimental group students' skills in linguistic fluency and creative writing. Especially, the values of Eta-squared for linguistic fluency and creative writing are 0.549 and 0.796, respectively. This shows that 54% of linguistic fluency among students and 79% of improvement in creative writing in Arabic are due to instruction using the Synectics and lateral thinking approach. Hence, the effectiveness of the proposed strategy in developing linguistic fluency and creative writing among the sample students is well concluded.

#### IV. CONCLUSIONS

The findings suggest that the teaching plan founded on Synectics and lateral thinking made a statistically significant impact on the fluency in the linguistic capacity and creative writing abilities among the students. The experimental group scored better on the post-test in linguistic fluency than the control group ( $t = 26.385$ ,  $p < 0.05$ ) with the large effect size ( $\eta^2 = 0.549$ ). Such results indicate a significant positive change in verbal expression, generation of ideas and linguistic coherence. On the same note, writing performance in creative writing was significantly enhanced in students who were exposed to the proposed strategy ( $t = 10.971$ ,  $p < 0.05$ ). The big effect size of creative writing ( $\eta^2 = 0.796$ ) suggests that the originality, content, and stylistic level of writing have improved significantly. The strategy enabled the flexibility of thinking and use of diverse linguistic structures by use of analogy, brainstorming and perspective shifting. On the whole, the research results indicate that incorporation of Synectics and lateral thinking into the Arabic language teaching process is an effective way of improving the level of higher-order language lessons, facilitating the capacity to express oneself fluent and being creative when writing at the university level.

#### Recommendations

The paper in research recommends conducting workshops to let faculty members in Arabic departments know Synectics and lateral thinking strategies. It recommends supporting the adoption of Synectics and lateral thinking strategies in teaching Arabic language skills. Nonetheless, there is a need

to develop training programs for teachers on how to effectively implement these strategies. The study also recommends including linguistic fluency and creative writing as core criteria in student assessments within curricula, in addition to conducting extensive experimental studies to examine the impact of these strategies on different age groups. Moreover, it is somehow necessary to utilize digital technology to support and enhance students' linguistic fluency and creative writing skills.

#### Suggestions for Future Research

- [1] The efficiency of Synectics strategy in improving writing skills among high school students.
- [2] The effect of adopting lateral thinking teaching strategies on improving the ability to construct complex sentences and linguistic structures.
- [3] Novel instruction strategies and their effect on boosting up linguistic fluency among non-native Arabic learners.
- [4] The role of the Synectics strategy in enhancing Arabic language skills among university students.
- [5] The relation among linguistic intelligence and Synectics strategies and their role in developing creative expression.
- [6] The impacts of a lateral thinking-based program on developing textual analysis skills among postgraduate students.

#### Appendix (1) Scale of Linguistic Fluency

TABLE VII SCALE OF LINGUISTIC FLUENCY

No	Items of scale for linguistic fluency	No	Yes
1	Ability to use varied and precise vocabulary.		
2	Understanding the meanings of words in different contexts.		
3	Distinguishing between words with similar meanings and using them correctly.		
4	Appropriately employing synonyms to enhance meaning.		
5	Correct use of antonyms in written and spoken expression.		
6	Constructing grammatically correct sentences.		
7	Varying sentence structures between simple, compound, and complex forms.		
8	Ability to express ideas clearly and coherently.		
9	Using linking words to improve the flow of ideas.		
10	Effective linguistic interaction in dialogues and discussions.		
11	Skill in summarizing and paraphrasing accurately.		
12	Ability to produce diverse texts using different linguistic styles.		
13	Distinguishing between different writing styles (e.g., narrative, descriptive, explanatory).		
14	Applying grammar and morphology rules accurately in writing and speaking.		
15	Avoiding common linguistic and grammatical errors.		
16	Using rhetorical devices such as metaphor, metonymy, and simile to enhance expression.		
17	Reading quickly with proper comprehension.		
18	Ability to translate an idea smoothly into written text.		
19	Ability to persuade and influence through language.		
20	Using context to understand the meaning of words and sentences		

#### Appendix (2): Creative Writing Test:

#### Instructions:

Write a personal essay about an experience that changed your perspective on life. The essay should reflect your feelings and thoughts honestly and creatively.

Write a short story beginning with the sentence: "On that mysterious day, I found an old letter ..." The story should include suspense and a sequential narrative in a creative manner (TABLE VII, VIII).

TABLE VIII SCALE OF CREATIVE WRITING SKILLS

Items of Creative Writing Skills:	3 Marks	2 Marks	1 Mark
Ability to generate a large number of ideas on the given topic.			
Use of varied and rich vocabulary that reflects depth of thinking.			
Smooth expression without interruptions or unnecessary repetition.			
Writing quickly while maintaining content quality.			
Ability to connect different ideas coherently within the text.			
Producing lengthy texts without losing cohesion or meaning.			
Ability to rephrase the same idea in multiple ways.			
Flexibility in using diverse writing styles (narrative, descriptive, dialogue).			
Use of unconventional linguistic structures that reflect the writer's creativity.			
Adapting style to the requirements of the text and context.			
Ability to provide multiple solutions to problems presented in the text.			
Use of imagination and artistic imagery in descriptions.			
Presenting new and uncommon ideas.			
Employing innovative rhetorical devices that give the text a distinctive character.			
Avoiding plagiarism or direct copying without personal input.			
Developing a personal narrative style that reflects the writer's identity.			
Creating an expected or surprising ending.			
Expressing ideas in a unique and original way.			

REFERENCES

[1] Al-Barakat, A., AlAli, R., Al-Hassan, O., & Al-Saud, K. (2025). Assessing the Impact of Predictive Thinking-Based Learning Activities on Enhancing Creative Writing in Language Learning Classrooms. *Educational Process: International Journal*, 15, e2025187.

[2] Al-Mastrihi, M. M. (2021). The Effect of Electronic Mind Maps Strategy on the Development of Thinking and Academic Achievement in Social Studies Among Fifth-Grade Students in Al-Shamli Governorate of the Kingdom of Saudi Arabia. *International Journal of Education, Learning and Development*, 9(7), 38-55.

[3] Al-Sharawy, S. A. (2024). Using a successful intelligence-based program for developing English writing skills and their impact on developing attitudes towards writing among preparatory schoolers. *Inf. Sci. Lett.*, 13(3), 481-495.

[4] Alshuaifan, A. S. (2024). Effectiveness of a Gamification-Based Enrichment Program in Developing EFL Creative Writing Skills among the Intermediate School Students. *Journal Of Educational and Psychological Researches*, 21(81), 650-702.

[5] Al-Zoubi, S. M. (2024). Linguistic Intelligence of Academically Gifted University Students. *Theory and Practice in Language Studies*, 14(10), 3067-3075.

[6] Campbell, B. (1987). Teach yourself how to be a general. *The Journal of Roman Studies*, 77, 13-29. <https://doi.org/10.2307/300572>

[7] Chen, X., Jantharajit, N., & Thongpanit, P. (2025). Enhancing Analytical Reading and Writing Skills in Vocational Education: The Role of Collaborative and Task-Based Learning. *Journal of Education and Learning*, 14(2), 150-158.

[8] Gibson, S. (1992). Serious Creativity: Using the Power of Lateral Thinking to Create New Ideas. *Industry Week*, 241(16), 43-44.

[9] Hammouda, M., & Abu Jarad, K. A. (2020). The effect of using six-hat strategy on developing creative thinking skills among fourth grade students. *Journal of Research in Curriculum Instruction and Educational Technology*, 6(3), 39-80.

[10] Hussien, A. M. (2018). Culture of Traits in Arabic Language Education: Students' Perception of the Communicative Traits Model. *International Journal of Instruction*, 11(4), 467-484.

[11] Kim, S., Choe, I., & Kaufman, J. C. (2019). The development and evaluation of the effect of creative problem-solving program on young children's creativity and character. *Thinking Skills and Creativity*, 33, 100590.

[12] Majeed, F. I., & Hussein, S. T. (2022). Analysis of the Arabic Reading Book for the Sixth Grade of Primary School in the Light of the Concepts of Intellectual Security. *International journal of health sciences*, 6(S6), 2093-2108.

[13] Mansour, R. W., & Alziq, A. Y. (2025). The Impact of a Synectics-Based Training Program on Enhancing Reflective Thinking Among Eighth-Grade Students in Jordan. *Journal of Educational and Psychological Studies*, 19(1), 48-63. <https://doi.org/10.53543/2521-7046.1002>

[14] Maroofi, Y., & Moludi, M. (2015). Effect of Synectics Teaching Method on Creativity Fostering in Students of Fifth-Grade Primary Schools. *Teaching and Learning Research*, 12(1), 31-44.

[15] Mashkour, S. H., & Hamoudy, L. S. (2022). Lateral thinking among students of the college of physical Education and sport sciences. *Modern Sport*, 21(4), 121-131.

[16] Mekheimer, M. (2011). Effectiveness of an integrated, holistic pedagogy of EFL skills in college students. *The Educational Research Journal*, 25(100), 41-47.

[17] Mohamed Jaber Mohamed El Tayeb, S., Mahmoud, M., Razek, A., & Tohamy Abdallah, H. (2024). Creative oral expression skills and their availability among linguistically gifted middle school students. *Journal of Faculty of Education-Assiut University*, 40(10), 250-281.

[18] Mustofa, R. F., & Hidayah, Y. R. (2020). The Effect of Problem-Based Learning on Lateral Thinking Skills. *International Journal of Instruction*, 13(1), 463-474.

[19] Suraid Almutairi, E. (2022). The Rewriting of Characters' Dialogue: Translating Literary Dialectal Dialogue in Saudi and Egyptian Novels. *Almutairi, ES (2022). The Rewriting of Characters' Dialogue: Translating Literary Dialectal Dialogue in Saudi and Egyptian Novels. Arab World English Journal for Translation & Literary Studies*, 6(4), 113-141.

[20] Vigna, J., Michael, R., & Russon, P. (2022). My COVID teacher-pedagogy and technology: Frontiers of online teaching in the creative writing classroom. *Text*, 26(1), 1-14.