

Systemic Approach to Teaching the Meaning, Use, Spelling and Pronunciation of English Adjectives: A Quasi-Experimental Study

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ABSTRACT

This study aimed to investigate the effectiveness of using the systemic approach to improve students' understanding of English adjectives, specifically in relation to spelling, pronunciation meaning, and use. This research employed a quasi-experimental design. The population consisted of third-semester students of Muhammadiyah University of Makassar in the 2017/2018 academic year. A total of 40 students were selected through purposive sampling and were divided into two groups namely an experimental group and a control group. The experimental group was taught using the systemic approach, which emphasized the intersection, interaction, and interrelation of linguistic elements, while the control group received instruction using conventional methods. The findings showed that the systemic approach led to significantly better outcomes. Post-test t-test results revealed scores of 6.363 for use, 7.131 for spelling, 6.309 for meaning, and 6.397 for pronunciation, all exceeding the critical t-table value of 2.024. These results indicated statistically significant improvements across all assessed aspects. This study concluded that the systemic approach supported integrative and effective learning of adjectives by helping students master not only their form but also their practical application.

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1. INTRODUCTION

Adjectives are essential elements of English grammar that function to describe, modify, and clarify nouns, allowing learners to express more precise and nuanced meanings. Adjectives help distinguish one noun from another by deciding characteristics such as size, shape, colour, age, and origin. In both spoken and written communication, adjectives play a central role in producing clear and accurate descriptions. Biber et al. emphasize the grammatical function of adjectives, particularly their role within noun phrases and as predicate complements, making them vital to sentence cohesion and meaning. Despite their significance, adjectives are frequently underemphasized in English language instruction.

In many educational settings, they are taught through rote memorization of word lists, often in alphabetical order, with little to no attention given to spelling, pronunciation, use, or practical application. As a result, learners tend to develop only a superficial understanding of adjectives (Deveci, 2021).

This instructional limitation was supported by Alqahtani (2015), who asserted that vocabulary teaching should not rely solely on isolated memorization but should instead be grounded in meaningful and contextual engagement (Alqahtani, 2015). In support of this, Nation (Gedife & Yigezu, 2024) advocated a multidimensional model of vocabulary learning, emphasizing that effective instruction must involve simultaneous attention to form, sound, and context to develop deeper lexical fluency. These insights aligned with the notion that grammar instruction particularly for adjectives should adopt an integrated, systemic model rather than treating linguistic elements as discrete units. Further evidence of the importance of adjectives came from Jitpranee (2017), who, in her analysis of popular science articles, found that adjectives played a crucial role in clarifying concepts and guiding reader comprehension. These findings suggested that adjectives are not only structurally important but also carry communicative weight, particularly in academic and professional contexts (Jitpranee, 2017). Such insights reinforce the need to teach adjectives in a way that reflects their functional value, rather than relying on memorization.

This issue was also evident in preliminary classroom observations conducted at the English Education Department of Muhammadiyah University of Makassar on October 10, 2017. The researcher found that students struggled to master, memorize, and identify adjectives, particularly due to the wide range of adjective categories. One major factor was the method of instruction, which relied on alphabetical word lists. Students were asked to memorize adjectives without being taught their spelling, pronunciation, meaning and use. This method did not reflect a systemic approach and therefore failed to support students in using adjectives effectively. Another contributing factor was the students' perception of English as a difficult subject, which reduced their motivation to study. These combined issues hindered their ability to use adjectives correctly and confidently in both spoken and written expression. In response to these challenges, it became clear that a more effective and structured approach was needed that integrates the essential components of adjective learning into a unified instructional strategy. This argument is further supported by Amusan (2025), who found that many non-native English learners faced difficulties when arranging adjectives correctly in sentences. The challenges arose not only because some adjectives had similar meanings, but also because the learners often applied patterns from their first language, which conflicted with the syntactic rules of English (Amusan & Victor, 2025). This highlights that adjective instruction must go beyond simple memorization and include structured guidance on how to use adjectives accurately and fluently in context.

In response to these challenges, this study adopted the systemic approach as its conceptual framework as described by Akil (2016), views learning as a holistic process in which various linguistic elements are interconnected through interaction, intersection, and interrelation. It promotes student-centered learning that encourages collaboration, exploration, and deeper engagement with language (Akil, 2016). Rather than isolating elements of grammar, the systemic approach treats them as parts of a unified whole. Akib et al. (2018) supported this perspective by demonstrating that instructional strategies grounded in student participation, engagement, and motivation significantly contribute to improved academic outcomes (Akib et al., 2018). This study adopts the systemic approach as a conceptual framework to guide the design of adjective instruction that integrates form, meaning, and usage. Kaufman (1983) reconceptualized the systems approach as a model in which all components work together to achieve purposeful learning outcomes (Kaufman, 1984). He emphasized that fragmented instructional elements weaken system effectiveness, reinforcing the need for coherence and alignment in instructional design. Similarly, Al-Bhery et al. (2010) described the systemic approach as a structure in which educational components are interconnected and work collectively to achieve specific learning goals (Al-bhery et al., 2010). Fahmy and Lagowski (2011) further argued that the

systemic approach fosters meaningful learning, as it aligns with the brain's natural tendency to process information through patterns and conceptual relationships (Fahmy & Lagowski, 2011).

Previous studies shown that the systemic approach can be effectively implemented in grammar instruction. Fitriani et al. (2019), applied this approach in teaching verbs and found that it significantly enhanced students' mastery by integrating form, function, and usage through systemic approach (Fitriani et al., 2018). Similarly, Mallombasi et al. (2018) employed the systemic approach in teaching adjectives and reported positive results. However, their implementation did not focus on integrating the four key dimensions of adjective learning: spelling, pronunciation, meaning, and use (Mallombasi et al., 2018). While many previous investigations addressed general vocabulary acquisition or other grammatical categories, the present study focused specifically on adjectives. Building on both theoretical insights and observed instructional gaps, this study proposed an integrated model of adjective instruction focused on spelling, pronunciation, meaning, and use—dimensions often neglected in prior implementations. By referring to both empirical findings and relevant theoretical frameworks, the study contributed to the development of more effective strategies for teaching English grammar, particularly in the area of adjective mastery. The following sections presented the research method and findings in more detail.

2. METHODS

This study adopted a quasi-experimental research design, specifically a nonequivalent control group pretest-posttest design, to investigate the effectiveness of the systemic approach in teaching English adjectives. The population of this research consisted of 276 third-semester students enrolled in the English Education Department of Muhammadiyah University of Makassar during the 2017 academic year. From this population, a total of 40 students were selected using purposive sampling, two existing classes were selected one served as the experimental group (20 students), and the other as the control group (20 students). The experimental group received instruction using the systemic approach, while the control group was taught using conventional methods without the integration of systemic teaching principles. The primary research instrument was a comprehensive adjective test designed in alignment with the principles of the systemic approach. The test consisted of 4 items divided into four sections: (1) word formation, where students rearranged scrambled letters into correct adjective forms and matched them to meanings; (2) pronunciation tasks; 3) word selection, requiring the completion of sentences using appropriate adjectives. The instrument's content validity was ensured through relevant theoretical review and expert judgment by the senior lecturers in English language teaching, assessing material relevance, clarity of instructions, and appropriateness of difficulty level for the target learners. Data analysis employed an independent samples t-test to compare the posttest scores of the experimental and control groups, with a significance level set at $p < 0.05$. This statistical approach was used to determine whether there was a significant difference in students' mastery of adjectives between the two instructional methods.

3. FINDINGS AND DISCUSSION

A. The distribution of frequency and percentage score of students' use

Table 1. The classification of score of use of students' pretest in experimental and control group

No.	Classification	Score	Pre-test				Post-test			
			Experimental		Control		Experimental		Control	
			F	%	F	%	F	%	F	%
1	Very Good	91 – 100	-	-	-	-	-	-	-	-
2	Good	75 – 90	-	-	-	-	10	50	4	20
3	Fair	61 – 74	4	20	2	10	5	25	5	25

4	Poor	51 – 60	3	15	4	20	5	25	5	25
5	Very Poor	<50	13	65	14	70	-	-	6	30
Total			20	100	20	100	20	100	20	100

Table 1 showed that the pre-test results revealed that the majority of students in both the experimental and control groups were categorized as “Very Poor” and “Poor.” After the intervention, the experimental group demonstrated a substantial improvement, with 50% of the students attaining the “Good” category and none remaining in the “Very Poor” category. In contrast, the control group exhibited no significant progress, as most students continued to be classified within the lower performance categories.

a) Mean Score and Standard Deviation of Students’ Use

Table 2. Mean Score and Standard Deviation of students’ use in pre-test and post-test.

Test	Experimental Group		Control Group	
	Mean	Standar Deviation	Mean	Standard Deviation
Pre-Test	42	2.016	42.5	1.860
Post-Test	75	1.147	62.5	1.293

Table 2 showed that the results indicated a significant improvement in the experimental group’s performance after the treatment, as evidenced by the substantial increase in the mean score and standard deviation. In contrast, the control group showed only a slight improvement, indicating limited progress in the absence of intervention. These findings supported the effectiveness of the treatment in enhancing students’ use performance

b) Gain Score of Students Use Pre-Test and Post-Test.

Table 3. Gain of student’s use pre-test and post-test

Group	Pre-test	Post-test	Gain score
Experimental	42	75	33
Control	42.5	62.5	20

As shown in Table 3, the gain score of the experimental revealed that the experimental group achieved a greater improvement than the control group. This indicated that the treatment implemented in the experimental group resulted in a more substantial learning gain in students’ use of adjectives.

c) T-Test Value of Students Use Pre-Test and Post-Test.

Table 4. T-Test Value of Student’s in Experimental and Control Group

Group	T – Test	T –Table
Pre-test	3.948	2.024
Post-test	6.363	2.024

Table 4. The independent samples t-test results confirmed that there was a statistically significant difference between the experimental and control groups both before and after the treatment. The post-test t-value of 6.363, indicated that the systemic approach had a significant positive impact on students’ mastery of adjective use.

B. The distribution of Frequency and Percentage of the student's spelling

Table 5. Classification of score of spelling of students' pretest in experimental group and control group

No.	Classification	Score	Pre-test				Post-test			
			Experimental		Control		Experimental		Control	
			F	%	F	%	F	%	F	%
1	Very Good	91 – 100	-	-	-	-	4	20	-	-
2	Good	75 – 90	-	-	-	-	8	40	-	-
3	Fair	61 – 74	3	20	3	15	4	20	5	25
4	Poor	51 – 60	3	20	3	15	4	20	6	30
5	Very Poor	<50	14	60	14	70	-	-	9	45
Total			20	100	20	100	20	100	20	100

As shown in Table 5. The post-test results indicated a marked improvement in the experimental group, as evidenced by a shift from lower to higher score classifications. In contrast, the control group remained predominantly in the lower categories. These findings suggested that the treatment had a positive impact on students' spelling performance.

a) The Mean Score and Standard Deviation of Student's Spelling in Pre-Test and Post-Test

Table 6 Mean Score and Standard Deviation of student's Spelling in pre-test and post-test.

Test	Experimental Group		Control Group	
	Mean	Standar Deviation	Mean	Standard Deviation
Pre-Test	45.5	1.605	47.5	1.832
Post-Test	80	1.451	63	1.218

Table 6 showed the data indicated that both groups experienced improvement in spelling performance, however, the experimental group demonstrated a substantially greater increase. This suggested that the instructional treatment grounded in the systemic approach was more effective in enhancing students' spelling ability.

b) Gain Score of Students Spelling Pre-Test and Post-Test.

Table 7 Gain of student's Spelling pre-test and post-test

Group	Pre-test	Post-test	Gain score
Experimental	45.5	80	34.5
Control	42.5	56.5	14

As shown in table 7. the gain score data indicated that the experimental group outperformed the control group with a greater improvement in spelling performance. This result reinforces the conclusion that the systemic approach significantly contributed to enhancing students' ability in the spelling aspect of adjectives.

c) T-Test Value of Students Spelling Pre-Test and Post-Test.

Table 8. T-Test Value of Student's in Experimental and Control Group

Variable	T-Test Value	T-Table Value
Pre-test	3.151	2.024
Post-test	7.131	2.024

Table 8 Presented that the t-test values confirmed a statistically significant difference between the experimental and control groups. In the post-test, the t-test value of 7.131, indicated that the systemic approach had a significant positive effect on improving students' spelling performance.

C. The distribution of Frequency and Percentage of the student's Meaning

Table 9. Classification of score of meaning of students' pretest in experimental group and control group

No.	Classification	Score	Pre-test				Post-test			
			Experimental		Control		Experimental		Control	
			F	%	F	%	F	%	F	%
1	Very Good	91 – 100	-	-	-	-	-	-	-	-
2	Good	75 – 90	-	-	-	-	10	50	3	15
3	Fair	61 – 74	3	15	2	10	15	75	4	20
4	Poor	51 – 60	4	10	4	20	5	25	5	25
5	Very Poor	<50	13	75	14	70	-	-	8	40
Total			20	100	20	100	20	100	20	100

As presented in table 9 the post-test results revealed a marked improvement in the experimental group, with a substantial shift toward higher performance. In contrast, the control group exhibited only limited progress. These findings suggested that the systemic approach contributed significantly to enhancing students' understanding of adjective meaning.

a) The Mean Score and Standard Deviation of Student's Meaning in Pre Test and Post-Test

Table 10. Mean Score and Standard Deviation of student's Meaning in pre-test and post-test.

Test	Experimental Group		Control Group	
	Mean	Standar Deviation	Mean	Standard Deviation
Pre-Test	46	1.635	42	1.908
Post-Test	75	1.147	58	1.542

b) Gain Score of Students Meaning Pre-Test and Post-Test.

Table 11 Gain of student's Meaning pre-test and post-test

Group	Pre-test	Post-test	Gain score
Experimental	46	75	29
Control	42	58	16

Table 11. summarizes the gain scores between the pre-test and post-test for both groups. The experimental group achieved a gain of 29. while the control group achieved a gain of only 16. This

difference clearly showed that students in the experimental group made more substantial progress in mastering the meaning of adjectives.

c) T-Test Value of Students Meaning Pre-Test and Post-Test.

Table 12. T-Test Value of Student's in Experimental and Control Group

Variable	T-Test Value	T-Table Value
Pre-test	3.454	2.024
Post-test	6.309	2.024

As shown in Table 12. the t-test result increased from 3.454 in the pre-test to 6.309. This confirmed that the systemic approach significantly improved students' understanding of adjective meaning.

D. The distribution of Frequency and Percentage of the student's Pronunciation

Table 12. Classification of score of pronunciation of students' pretest in experimental group and control group.

No.	Classification	Score	Pre-test				Post-test			
			Experimental		Control		Experimental		Control	
			F	%	F	%	F	%	F	%
1	Very Good	91 – 100	-	-	-	-	4	20	-	-
2	Good	75 – 90	-	-	-	-	8	20	3	15
3	Fair	61 – 74	3	15	2	10	3	15	4	20
4	Poor	51 – 60	5	25	3	15	5	25	3	15
5	Very Poor	<50	12	60	15	75	-	-	10	50
Total			20	100	20	100	20	100	20	100

As shown in Table 12, The post-test results indicated a substantial improvement in the experimental group's pronunciation performance. In contrast, the control group remained largely concentrated in the lower classifications. This suggested that the systemic approach effectively enhanced students' pronunciation of adjectives.

a) The Mean Score and Standard Deviation of Student's Pronunciation in Pre-Test and Post-Test

Table 12. Mean Score and Standard Deviation of student's Pronunciation in pre-test and post-test.

Test	Experimental Group		Control Group	
	Mean	Standar Deviation	Mean	Standard Deviation
Pre-Test	48	1.609	39.5	1.877
Post-Test	79.5	1.504	54.5	1.791

Table 12. Table 4.43 presented the experimental group demonstrated greater improvement and consistency in pronunciation, as reflected by a higher mean score (79.5) and reduced standard deviation (1.504) in the post-test, compared to the control group. This supports the effectiveness of the systemic approach in enhancing pronunciation performance.

b) Gain Score of Students Pronunciation Pre-Test and Post-Test.

Table 13. Gain of student's Pronunciation pre-test and post-test

Group	Pre-test	Post-test	Gain score
Experimental	48	79.5	31.5
Control	39.5	54.5	15

The gain scores between the pre-test and post-test are displayed in Table 13. The gain score analysis indicated that the experimental group made greater improvement in pronunciation than the control group, supporting the effectiveness of the systemic approach.

c) T-Test Value of Students Use Pre-Test and Post-Test.

Table 14. T-Test Value of Student's in Experimental and Control Group

Variable	T-Test Value	T-Table Value
Pre-test	2.586	2.024
Post-test	6.397	2.024

Based on Table 14. The t-test analysis confirmed a statistically significant difference between the experimental and control groups, indicating that the systemic approach effectively improved students' pronunciation in the use of adjectives.

Building on the results above, the findings of this study demonstrated that the implementation of the systemic approach significantly enhanced students' mastery of English adjectives, particularly in the dimensions of spelling, pronunciation, meaning, and use. Pre-test and post-test data revealed substantial improvements across all aspects in the experimental group, while the control group, which received conventional instruction, showed only modest progress. Students taught through the systemic approach exhibited greater ability to apply adjectives accurately in both written and spoken contexts. These findings supported Akil's (2016) framework, which emphasized the intersection, interaction, and interrelation of linguistic elements. Rather than teaching vocabulary in isolation, the systemic approach integrated various dimensions of word knowledge, enabling learners to understand how adjectives function meaningfully within sentence structures (Akil, 2016).

These results were also in line with previous studies (Fitriani et al., 2018); (Mallombasi et al., 2018), which highlighted the positive impact of integrated grammar instruction. Furthermore, this study provided empirical support for the practical application of the systemic approach in real classroom settings, particularly for teaching specific grammatical categories such as adjectives. The improvement observed in students' performance across all four dimensions suggested that when instruction is designed holistically connecting form, function, and context—students are more likely to retain and apply language features effectively. These outcomes offer valuable insights for language educators seeking to move beyond traditional memorization-based methods toward more meaningful and learner-centered instruction.

4. CONCLUSION

Based on the findings of this study, it can be concluded that the implementation of the systemic approach was effective in enhancing students' mastery of English adjectives. The experimental group, which received instruction through a systemic model integrating spelling, pronunciation, meaning, and use, outperformed the control group across all measured indicators. The analysis of pre-test and post-test scores, gain scores, and t-test results demonstrated a significant improvement in the experimental group. These findings indicated that integrated instructional approach facilitates more effective acquisition of both linguistic form and functional usage.

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