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Revisiting Arabic Grammar Instruction: An Experimental Study on the Pedagogical Application of Antoun Dahdah's Linguistic Framework

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Abstract

Arabic grammar instruction is often perceived as complex and cognitively demanding due to its abstract and rule-based nature. This study revisits Arabic grammar instruction by examining the pedagogical application of Antoun Dahdah's linguistic framework, which emphasizes the visual and systematic organization of grammatical rules. Using a quasi-experimental design, the study was conducted at a public Islamic senior high school (MAN 1 Lamongan, Indonesia) and involved two intact eleventh-grade classes: an experimental group taught using Dahdah's framework and a control group taught through conventional instruction. The instructional focus was on *fi'l muḍā'iri' mansūb* and *majzūm*. Data were collected through pre-tests and post-tests to measure grammar achievement and a questionnaire to examine students' perceptions. The results showed a significant difference in post-test scores in favor of the experimental group. Normalized gain analysis indicated that the Dahdah-based instruction was moderately effective in improving students' grammatical competence. In addition, students reported highly positive perceptions toward the clarity and organization of the instructional framework. These findings suggest that Antoun Dahdah's linguistic framework offers a pedagogically valuable approach to reorganizing Arabic grammar instruction in secondary education.

Keywords: *Arabic grammar instruction, Antoun Dahdah, Antoine El Dabdab, visual grammar, quasi-experimental study*

Abstrak

Pembelajaran tata bahasa Arab sering dipersepsi sebagai materi kompleks dan membebani secara kognitif karena sifatnya yang abstrak dan berbasis kaidah. Penelitian ini meninjau kembali pembelajaran tata bahasa Arab melalui pengujian penerapan pedagogis kerangka linguistik Antoun Dahdah, yang menekankan pengorganisasian kaidah secara visual dan sistematis. Dengan menggunakan desain kuasi-eksperimen, penelitian ini dilaksanakan di sebuah madrasah aliyah negeri (MAN 1 Lamongan, Indonesia) dan melibatkan dua kelas XI yang telah ada, yaitu kelompok eksperimen yang memperoleh pembelajaran berbasis kerangka Dahdah dan kelompok kontrol yang memperoleh pembelajaran konvensional. Materi pembelajaran difokuskan pada *fi'l muḍāri'* mansūb dan majzūm. Data dikumpulkan melalui pre-test dan post-test untuk mengukur pencapaian belajar tata bahasa, serta angket untuk mengkaji persepsi peserta didik. Hasil penelitian menunjukkan adanya perbedaan yang signifikan pada skor post-test yang mengunggulkan kelompok eksperimen. Analisis *normalized gain* menunjukkan bahwa pembelajaran berbasis kerangka Dahdah berada pada kategori cukup efektif dalam meningkatkan kompetensi gramatikal peserta didik. Selain itu, peserta didik menunjukkan persepsi yang sangat positif terhadap kejelasan dan keteraturan kerangka pembelajaran yang diterapkan. Temuan ini mengindikasikan bahwa kerangka linguistik Antoun Dahdah menawarkan pendekatan pedagogis yang bernilai untuk mereorganisasi pembelajaran tata bahasa Arab pada jenjang pendidikan menengah.

Kata Kunci: *Pembelajaran Kaidah bahasa Arab, Antoun Dahdah, Antoine El Dabdab, tata bahasa visual, studi kuasi-eksperimen*

Introduction

Arabic grammar instruction (*qawā'id al-lughah al-'Arabiyyah*) has long occupied a position that is both crucial and problematic within Arabic language education, whether in first-language or foreign-language contexts. On the one hand, mastery of grammatical rules is widely regarded as a fundamental foundation for understanding sentence structure, meaning, and linguistic accuracy.¹ On the other hand, the teaching of Arabic grammar is often perceived by learners as abstract, complex, and cognitively demanding, particularly when it is delivered through traditional approaches that emphasize rule memorization,

¹ Khoirul Mubin, Nasiruddin, Bobby Bagas Purnama, and Dionisia Folliero. "Linguistic Harmonization: Dissecting Alfiyah Ibn Malik with Chomsky's Transformational Generative Theory." *Alibbaa': Jurnal Pendidikan Bahasa Arab* 5, no. 2 (July 2024): 215–42. <https://doi.org/10.19105/ajpba.v5i2.14610>.

technical terminology, and fragmented formal analysis.² Such conditions frequently result in low learning motivation, limited transfer of grammatical knowledge to actual language use, and constrained achievement of meaningful grammar learning outcomes.³

Within the field of language pedagogy, this situation is closely linked to the longstanding debate surrounding approaches to grammar instruction, particularly the distinction between implicit and explicit approaches. Implicit instruction emphasizes the acquisition of linguistic structures through exposure and communicative use, whereas explicit instruction focuses on the conscious, systematic, and structured presentation of grammatical rules.⁴ In the context of Arabic, which is characterized by a complex system of *i'rāb* and intricate grammatical relations, explicit grammar instruction is still considered pedagogically relevant. However, the effectiveness of this approach largely depends on how grammatical content is organized and presented. Linear, predominantly text-based presentations that fragment grammatical rules into isolated units tend to increase learners' cognitive load,⁵ thereby making it difficult for them to perceive the interconnections among form, function, and meaning that underlie Arabic syntactic rules (*qawā'id nahwiyyah*).

This pedagogical reality is clearly reflected in the research context of this study, namely MAN 1 Lamongan, Indonesia. In this Islamic senior high school, Arabic is positioned as a core subject aimed at developing students' linguistic competence and supporting deeper

² Holandiyah, Muhamad, Dian Erlina, Lenny Marzulina, and Fitria Rembulan Ramadhani. "Grammar Instruction in Communicative Language Teaching Classrooms: Student Teachers' Perceptions." *Edukasi: Jurnal Pendidikan Dan Pengajaran*, June 30, 2021, 66–77. <https://doi.org/10.19109/ejpp.v8i1.8510>.

³ Han, Feifei. "The Relations Between Motivation, Strategy Use, Frequency, and Proficiency in Foreign Language Reading: An Investigation With University English Language Learners in China." *Sage Open* 11, no. 2 (April 2021). <https://doi.org/10.1177/21582440211008423>.

⁴ Burhanuddin Yasin, Faisal Mustafa, Diva Safina, Yusri Yusuf, Khairuddin Khairuddin, and Barep Sarinauli, "Introducing Contextual Teaching and Learning as a Transition from Textbook-Based Curriculum to the National Curriculum," *European Journal of Educational Research* 12, no. 4 (October 2023): 1767–79, <https://doi.org/10.12973/eu-jer.12.4.1767>.

⁵ Thurairasu, Vanitha. "Gamification-Based Learning as The Future of Language Learning: An Overview." *European Journal of Humanities and Social Sciences* 2, no. 6 (November 2022): 62–69. <https://doi.org/10.24018/ejsocial.2022.2.6.353>.

engagement with Arabic-language materials. In practice, however, significant challenges in *qawā'id* instruction were identified: students were often unable to achieve the expected level of grammatical mastery, particularly in understanding grammatical operators (*ʿawāmil*) that trigger specific *i'rāb* forms. Based on interviews with an Arabic language teacher at MAN 1 Lamongan, students frequently struggled to explain the grammatical reasons why a word takes the genitive (*majrūr*) case or why a verb form undergoes *jazm* when presented with examples on the board. Even during examinations, many students continued to make errors in placing certain elements (e.g., *ism al-ishārah*) appropriately within sentence structures. These findings indicate that the instructional objectives of Arabic grammar learning have not been optimally achieved, resulting in low levels of mastery of Arabic sentence structure.

Field findings further indicate that these challenges are intertwined with two closely related factors. First, many students come from general (non-religious) school backgrounds, which means they are not accustomed to systematically applying *naḥw* rules in Arabic sentence construction. Second, the instructional strategies predominantly employed remain traditional or conventional in nature. Teacher interview data reveal that *qawā'id* instruction is largely conducted through traditional methods with limited student engagement, rendering this approach less effective in facilitating deep grammatical understanding. Moreover, classroom observations also point to constraints related to instructional time; in the classes under study, Arabic language instruction is conducted only twice a week, which further underscores the need for more efficient and pedagogically effective instructional strategies.

In recent years, a growing body of international research has demonstrated increasing attention to the effectiveness of Arabic grammar instruction through pedagogical approaches that seek to reconstruct the presentation of grammatical rules in ways that are more meaningful and accessible to learners. Research in this area has shifted beyond a normative emphasis on the importance of mastering *qawā'id* toward a focus on how grammatical rules can be pedagogically organized and presented to enhance conceptual understanding and learning outcomes.

A number of experimental and quasi-experimental studies provide empirical evidence that modifications in the design of Arabic grammar instruction have a significant impact on learning outcomes.

Eltahir et al. (2020), for instance, reported that the implementation of game-based learning in Arabic grammar courses in higher education significantly improved students' academic achievement, motivation, and engagement compared to traditional instructional methods.⁶ These findings are consistent with those of Khasawneh (2021), who demonstrated that a flipped classroom strategy positively influenced the development of grammatical concepts among primary school learners. Collectively, these studies suggest that Arabic grammar instruction remains effective when delivered explicitly, provided that it is supported by pedagogical designs that enable learners to access and process grammatical rules in a more structured and active manner.⁷ At the secondary education level, Al-Maqableh and Al-Makhadmeh (2024) likewise found that the use of a collaborative video-based flipped learning strategy significantly enhanced students' achievement in Arabic grammar while simultaneously fostering higher levels of classroom engagement.⁸

Beyond instructional strategies, researchers have also directed attention toward the ways in which Arabic grammatical rules are represented. Abdul Hamid et al. (2024) developed a web-based interactive infographic module for teaching Arabic grammar at the university level and found that the visual and systematically organized presentation of grammatical rules enhanced students' learning interest and conceptual understanding.⁹ These findings indicate that difficulties

⁶ Eltahir, Mohd. Elmagzoub, Najeh Rajeh Alsalihi, Sami Al-Qatawneh, Hatem Ahmad AlQudah, and Mazan Jaradat. "The Impact of Game-Based Learning (GBL) on Students' Motivation, Engagement and Academic Performance on an Arabic Language Grammar Course in Higher Education." *Education and Information Technologies* 26, no. 3 (May 2021): 3251–78. <https://doi.org/10.1007/s10639-020-10396-w>.

⁷ Khasawneh, Najwa Ahmad Saleem. "The Effectiveness of a Flipped Classroom Strategy in Developing Grammatical Concepts Among Fifth Grade Primary School Students." *European Journal of Educational Research* volume-11-2022, no. volume-11-issue-1-january-2022 (January 2021): 207–16. <https://doi.org/10.12973/eu-jer.11.1.207>.

⁸ Al-Maqableh, Naser, and Batool Al-Makhadmeh. "The Effects of the Collaborative Video-Based Flipped Learning Strategy on the Achievements in Arabic Grammar of 10th-Grade Female Students." *Theory and Practice in Language Studies* 14, no. 8 (August 2024): 2595–605. <https://doi.org/10.17507/tpls.1408.32>.

⁹ Abdul Hamid, Mohd Fauzi, Muhammad Sabri Sahrir, Mohd Firdaus Yahaya, and Muassomah Muassomah. "Development of a Web-Based Interactive Infographic Module for Learning Arabic Grammar at a Malaysian University." *Journal of Education and Learning (EduLearn)* 19, no. 4 (November 2025): 2302–12. <https://doi.org/10.11591/edulearn.v19i4.22258>.

in Arabic grammar learning do not stem solely from the inherent complexity of the rules themselves, but also from how those rules are packaged and presented as an interconnected system. In line with this perspective, Hakmi Hidayat and Wahyudi (2019), through a quasi-experimental study at the secondary education level, reported that Arabic grammar instruction delivered in the style of Antoun Dahdah, namely through tabular formats and visually organized rule presentation, resulted in better learning outcomes than conventional instruction.¹⁰ Although limited in scope, these findings provide preliminary evidence that Dahdah's framework for grammatical representation holds pedagogical potential that merits further empirical investigation in broader contexts.

From a linguistic processing perspective, Midwah and Alhawary (2020) demonstrated that the presence of visual grammatical markers, such as diacritics (*ḥarakāt*), has a significant effect on reading speed, accuracy, and comprehension among learners of Arabic as a second language.¹¹ While their study did not directly examine classroom-based *qawā'id* instruction, the findings reinforce the argument that formal representations of grammatical features exert tangible cognitive effects on learners' linguistic performance, thereby offering important implications for the development of Arabic grammar pedagogy.

Despite consistent evidence from recent studies indicating that innovative instructional strategies, the use of visual media, and structured representations contribute positively to Arabic grammar learning, most existing research continues to focus primarily on methods, technologies, or instructional media in general. In many cases, visual representations are treated merely as pedagogical aids rather than as integral components of a linguistic framework that systematically organizes Arabic grammatical rules as a unified conceptual system. Consequently, empirical studies that specifically examine the pedagogical application of linguistic frameworks offering structured and integrated reorganization of *qawā'id* remain relatively limited.

¹⁰ Hakmi Hidayat, and Hakmi Wahyudi. "Teaching Arabic Grammar in Style of Antoine El Dahdah / Ta'limu Qawā'id al-Lughah al-Arabiyah Bi Ushlūbi Antoine El Dahdah." *Al-Manar: English and Arabic Journal* 10, no. 1 (2019): 49–74.

¹¹ MIDHWAH, ALI al, and MOHAMMAD T. ALHAWARY. "Arabic Diacritics and Their Role in Facilitating Reading Speed, Accuracy, and Comprehension by English L2 Learners of Arabic." *The Modern Language Journal* 104, no. 2 (June 2020): 418–38. <https://doi.org/10.1111/modl.12642>.

Within this context, the approach developed by Antoun (Antoine-Robert) Dahdah emerges as particularly relevant for investigation. Dahdah is best known for his work *A Dictionary of Arabic Grammatical Nomenclature*, in which he presents Arabic grammar through tables, diagrams, and functionally organized classifications designed to facilitate learners' access to grammatical complexity.¹² The linguistic framework he developed does not introduce new grammatical rules; rather, it reorganizes established rules based on principles of structural coherence and cognitive efficiency, allowing relationships among form, function, and meaning to be understood more systematically. Although Dahdah's works have been widely used as practical references in qawā'id instruction and have been examined in limited local contexts, systematic empirical research evaluating the pedagogical application of this linguistic framework within controlled instructional designs remains scarce. Therefore, investigating Dahdah's approach is essential for bridging the gap between conceptual developments in Arabic grammar organization and stronger empirical evidence regarding its effectiveness in enhancing learners' grammatical understanding.

Based on the conceptual background and empirical findings from the field, this study aims to revisit Arabic grammar instruction through the pedagogical application of Antoun Dahdah's linguistic framework in the context of MAN 1 Lamongan. Specifically, the study focuses on the grammatical topics of *fi'l muḍā'irī 'mansūb* and *majzūm* taught in the eleventh grade during the second semester. The study is guided by two research questions: (1) Is there a significant difference in Arabic grammar achievement between students taught using Antoun Dahdah's linguistic framework and those taught through conventional lecture-based instruction? and (2) How do students perceive the application of Antoun Dahdah's linguistic framework in Arabic grammar learning? Accordingly, this study not only examines instructional effectiveness in terms of learning outcomes but also considers learners' experiences and responses as part of a comprehensive pedagogical evaluation.

¹² Antoine El-Dahdah. *A Dictionary of Arabic Grammatical Nomenclature*. Librairie du Liban Publishers, 1993.

Method

This study employed a quantitative approach using a quasi-experimental design of the non-equivalent control group type, aiming to compare Arabic grammar (*qawā'id*) learning outcomes between students who received instruction based on Antoun Dahdah's linguistic framework and those who participated in conventional instruction. The study was conducted at MAN 1 Lamongan during the 2024/2025 academic year, with eleventh-grade students serving as the research participants. Two intact classes were selected as the sample, each consisting of 17 students, resulting in a total of 34 participants. One class was designated as the experimental group, while the other served as the control group, with the assumption of initial equivalence based on pre-test results, as is commonly applied in quasi-experimental educational research.¹³

The experimental group received Arabic grammar instruction through the application of Antoun Dahdah's linguistic framework, which emphasizes the visual and systematic presentation of grammatical rules in the form of tables, diagrams, and functional classifications. The instructional content focused on *fi'l muḍāri' mansūb* and *majzūm*, in accordance with the eleventh-grade Arabic curriculum for the second semester, and was presented in an integrated manner using sentence-level examples, including relevant Qur'anic verses, to clarify the relationships among form, function, and meaning. In contrast, the control group received Arabic grammar instruction through a conventional approach dominated by lecture-based teaching, text-based explanations of grammatical rules, and written exercises, reflecting common instructional practices in Arabic grammar classrooms.¹⁴

The research instruments consisted of an Arabic grammar achievement test and a student perception questionnaire. The achievement test was administered as both a pre-test and a post-test to measure students' learning outcomes before and after the instructional treatment. Test items were developed based on competency indicators for *fi'l muḍāri' mansūb* and *majzūm* and were validated for content validity. The perception questionnaire was constructed using a Likert-scale format and administered to the experimental group to collect data

¹³ Creswell, J. W. *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research (4th Ed.)*. 2nd ed. Pearson Education, 2012.

¹⁴ Ellis, Rod. "Current Issues in the Teaching of Grammar: An SLA Perspective." *TESOL Quarterly* 40, no. 1 (March 2006): 83. <https://doi.org/10.2307/40264512>.

on students' responses to Arabic grammar instruction based on Dahdah's linguistic framework. The combination of achievement testing and perceptual data was intended to provide a more comprehensive understanding of instructional effectiveness and learner acceptance.¹⁵

Research data were analyzed using inferential statistical techniques. Tests of normality and homogeneity were first conducted to ensure that the assumptions for parametric analysis were met. Subsequently, an independent samples *t*-test was employed to examine differences in learning outcomes between the experimental and control groups, while normalized gain (N-Gain) values were calculated to determine the level of effectiveness of Dahdah-based instruction. This analytical approach is widely used in educational research to evaluate both differences in learning outcomes and the magnitude of students' learning gains following instructional interventions.¹⁶

Results and Discussion

The researcher presents the results of quantitative data analysis from the *qawā'id* pre-test and post-test (focusing on *fi'l muḍā'ri' mansūb* and *majzūm*) administered to the experimental group (instruction based on Antoun Dahdah's framework) and the control group (conventional instruction), with *n* = 17 for each group. Descriptive statistics summarizing initial ability and final achievement are presented in Table 1.

Table 1. Descriptive Statistics of Pre-test and Post-test Scores

Group	Test	n	Mean	SD	Min	Max
Experimental	Pre-test	17	53.65	4.27	47	61
Control	Pre-test	17	54.76	4.83	46	62
Experimental	Post-test	17	80.35	8.44	65	97
Control	Post-test	17	69.94	7.46	60	84

As shown in Table 1, the mean pre-test scores of the experimental group (53.65) and the control group (54.76) are relatively close, indicating that the two groups had comparable initial grammatical ability. Following the instructional treatment, the mean post-test score of

¹⁵ Dörnyei, Zoltán, and Tatsuya Taguchi. *Questionnaires in Second Language Research*. Routledge, 2009. <https://doi.org/10.4324/9780203864739>.

¹⁶ Hake, Richard R. "Interactive-Engagement versus Traditional Methods: A Six-Thousand-Student Survey of Mechanics Test Data for Introductory Physics Courses." *American Journal of Physics* 66, no. 1 (January 1998): 64–74. <https://doi.org/10.1119/1.18809>.

the experimental group increased to 80.35, while that of the control group increased to 69.94. Descriptively, the difference in post-test means between the two groups reached 10.41 points, suggesting that the experimental group achieved higher final performance.

To further illustrate changes in achievement beyond mean scores, the distribution of achievement categories (based on score ranges) for the pre-test and post-test is presented in Table 2:

Table 2. Distribution of Achievement Categories

Score Category	Pre-test Experimental	Pre-test Control	Post-test Experimental	Post-test Control
Very good (90–100)	0	0	3	0
Good (75–89)	0	0	12	5
Fair (60–74)	2	3	2	12
Poor (45–59)	15	14	0	0
Very poor (<44)	0	0	0	0

Table 2 shows that, in the pre-test, the majority of students in both groups were classified in the Poor (45–59) category (15 students in the experimental group and 14 students in the control group). In the post-test, however, the distribution for the experimental group shifted markedly toward the Good (75–89) category (12 students) and even the Very good (90–100) category (3 students). In contrast, the control group was predominantly distributed across the Fair (60–74) category (12 students) and the Good (75–89) category (5 students). These results indicate that improvement in the experimental group was reflected not only in higher mean scores but also in a substantive shift toward higher achievement categories.

Prior to conducting inferential analyses, the assumptions for parametric testing were examined through tests of normality (Shapiro–Wilk) and homogeneity of variance (Levene), as summarized in Table 3.

Table 3. Tests of Normality and Homogeneity

Test	Statistic	p-value
Shapiro–Wilk (Pre-test Experimental)	0.964	0.711
Shapiro–Wilk (Pre-test Control)	0.949	0.437
Shapiro–Wilk (Post-test Experimental)	0.973	0.867
Shapiro–Wilk (Post-test Control)	0.936	0.276
Levene (Post-test Homogeneity)	0.091	0.765

All p-values from the Shapiro–Wilk tests for both pre-test and post-test scores exceeded 0.05, indicating that the data were normally distributed. The Levene test for post-test scores also yielded a p-value of 0.765 (> 0.05), suggesting homogeneity of variance between groups. With these assumptions satisfied, parametric *t*-tests were deemed appropriate. Subsequently, within-group changes from pre-test to post-test were examined using paired samples *t*-tests, as presented in Table 4.

Table 4. Paired Samples t-Test Results

Group	Mean pre-test	Mean post-test	Δ Mean (post-pre)	t (df=16)	p- value
Experimental	53,65	80,35	26,71	13,890	<0,001
Control	54,76	69,94	15,18	8,010	<0,001

Both the experimental and control groups demonstrated statistically significant improvements from pre-test to post-test ($p < 0.001$). However, the magnitude of improvement in the experimental group ($\Delta = 26.71$) was greater than that in the control group ($\Delta = 15.18$), indicating a stronger descriptive gain for students taught using Dahdah's framework. To address the research question concerning differences in final achievement between groups, an independent samples *t*-test was conducted on post-test scores. The results are summarized in Table 5.

Table 5. Independent Samples t-Test on Post-test Scores

Mean Experimental	Mean Control	Δ Mean	t (df=32)	p	Levene p
80,35	69,94	10,41	3,810	<0,001	0,765

Table 5 indicates a statistically significant difference in post-test scores between the experimental and control groups ($t(32) = 3.810$, $p < 0.001$). The experimental group achieved a higher mean score than the control group by 10.41 points, demonstrating that instruction based on Dahdah's framework resulted in superior *qawā'id* learning outcomes compared to conventional instruction in this research context. Beyond statistical significance, instructional effectiveness was further evaluated using normalized gain (N-Gain) analysis. A summary of N-Gain values,

including minimum and maximum percentages to ensure transparency of learning gains, is presented in Table 6.

Table 6. Normalized Gain (N-Gain) Results

Group	Mean N-Gain	Mean N-Gain (%)	Min (%)	Max (%)	Effectiveness Category
Experimental	0.579	58	24	93	Moderately effective
Control	0.332	33	11	63	Ineffective

The experimental group achieved an average N-Gain of 58%, classified as moderately effective, with individual gains ranging from 24% to 93%. In contrast, the control group obtained an average N-Gain of 33%, categorized as ineffective, with gains ranging from 11% to 63%. These findings indicate that instruction based on Dahdah's framework not only produced higher final scores but also yielded greater learning gains than conventional instruction. Finally, students' perceptions of Dahdah-based instruction were measured using a questionnaire. A summary of the questionnaire results is presented in Table 7.

Table 7. Summary of Student Perception Questionnaire Results

Indicator	Value
Number of respondents (N)	34
Number of items	18
Likert scale	1–4
Total score obtained	2104
Maximum possible score	2448
Percentage	86%
Mean score per item (1-4)	3.44

As shown in Table 7, the questionnaire score reached 86%, with a mean of 3.44 on a four-point Likert scale, indicating that students' responses fell within the very positive category. Overall, these results suggest that Dahdah-based instruction was perceived as appropriate and beneficial. Accordingly, the questionnaire data corroborate the achievement test findings, demonstrating that instruction grounded in Dahdah's linguistic framework not only enhanced cognitive learning outcomes but was also well received by students.

Discussion

The findings of this study provide empirical evidence that the pedagogical application of Antoun Dahdah's linguistic framework significantly enhances students' achievement in Arabic grammar (*qawā'id*) compared to conventional instruction. The significant difference in post-test scores between the experimental and control groups indicates that the effectiveness of Arabic grammar instruction is not determined solely by the choice between explicit or implicit approaches, but is strongly influenced by how grammatical rules are organized and represented in the instructional process. In this regard, Dahdah's framework functions as a cognitive mechanism that supports learners in constructing a more integrated understanding of grammar, rather than merely memorizing isolated rules.

The superior performance of the experimental group can be explained by the core principles of Dahdah's framework, which emphasize the visualization and systematization of grammatical rules. Presenting grammar through tables and diagrams enables learners to process grammatical information simultaneously by making explicit the relationships among form (*ṣīghah*), syntactic function, and semantic implications.¹⁷ Unlike conventional instruction, which typically presents rules in a linear and sequential manner, the Dahdah approach facilitates the development of more stable grammatical mental schemas. Consequently, learning moves beyond procedural rule application toward conceptual understanding, enabling students to explain the grammatical rationale underlying changes in *i'rāb*, an aspect that previously constituted a major difficulty in the research context.

These findings are consistent with cognitive load theory, which posits that learning is more effective when complex information is presented in formats that minimize extraneous cognitive load and optimize schematic processing.¹⁸ In this study, Dahdah's tables and diagrams functioned as external cognitive scaffolds, reducing the need for learners to process multiple grammatical elements separately. By

¹⁷ Mahyudin Ritonga, Hendro Widodo, Munirah, and Talqis Nurdianto. "Arabic Language Learning Reconstruction as a Response To Strengthen Al-Islam Studies at Higher Education." *International Journal of Evaluation and Research in Education (IJERE)* 10, no. 1 (March 2021): 355–63.

¹⁸ Sweller, John, Stéphanie Roussel, and André Tricot. "Cognitive Load Theory and Instructional Design for Language Learning." In *The Cambridge Handbook of Working Memory and Language*, 859–80. Cambridge University Press, 2022. <https://doi.org/10.1017/9781108955638.045>.

viewing grammatical structures holistically, students were better able to integrate new knowledge into existing schemas. Therefore, the significant improvement observed in the experimental group cannot be separated from the role of Dahdah's framework in facilitating more efficient grammatical information processing.

Nevertheless, the normalized gain analysis indicates that the effectiveness of Dahdah-based instruction falls within the moderately effective category rather than a high level. This finding should be interpreted cautiously and should not be viewed as an inherent limitation of Dahdah's approach. One important factor to consider is the relatively short duration of the instructional intervention, which may not have provided sufficient time for learners to fully internalize visual representations as stable tools for grammatical reasoning. Research in grammar pedagogy suggests that changes in the representation of grammatical knowledge, particularly shifts from linear to visual-systematic formats, require an extended adaptation period before yielding optimal learning outcomes.¹⁹

In addition, learners' prior educational backgrounds, which were largely shaped by conventional lecture-based instruction and rule memorization, may have influenced the magnitude of learning gains. The transition from instruction emphasizing procedural rule application to approaches that require conceptual and relational understanding can initially impose additional cognitive demands, especially during the early stages of implementing visual frameworks.²⁰ In addition, learners' prior educational backgrounds, which were largely shaped by conventional lecture-based instruction and rule memorization, may have influenced the magnitude of learning gains. The transition from instruction emphasizing procedural rule application to approaches that require conceptual and relational understanding can initially impose additional cognitive demands, especially during the early stages of implementing visual frameworks.

¹⁹ Ferguson-Patrick, Kate. "Cooperative Learning in Swedish Classrooms: Engagement and Relationships as a Focus for Culturally Diverse Students." *Education Sciences* 10, no. 11 (October 2020): 312. <https://doi.org/10.3390/educsci10110312>.

²⁰ Annida Zulfa, Hamsi Mansur, Monry Fraick Nicky Gillian Ratumbusang, Martine Warren, and Terry Harris. "Developing an Innovative Board Game Using a Cooperative Learning Approach to Foster Interest in Learning Arabic." *Alibbaa': Jurnal Pendidikan Bahasa Arab* 6, no. 1 (January 2025): 99–119. <https://doi.org/10.19105/ajpba.v6i1.17834>.

Another factor contributing to the moderate N-Gain results relates to the nature of the instructional content itself, namely *fi 'l muḍāri' mansūb* and *majzūm*, which inherently involve high levels of abstraction and syntactic complexity. Mastery of these topics requires an understanding of *'awāmil*, inter-element sentence relations, and sensitivity to changes in *i 'rāb* that are not always overtly realized on the surface level of language.²¹ Thus, although Dahdah's framework helps simplify grammatical representation, mastery of such content still necessitates repeated practice and sustained exposure to enable learners to transfer conceptual understanding into productive language use.²²

Furthermore, the identified limitations in effectiveness open broader discussion regarding the pedagogical boundaries of visual frameworks in Arabic grammar instruction. While Dahdah's framework is powerful in systematically reorganizing grammatical rules, it nonetheless requires integration with complementary instructional strategies, such as contextualized practice, grammatical problem-solving tasks, and communicative language use. Accordingly, the moderate N-Gain outcomes reflect realistic instructional results and suggest that the pedagogical potential of Dahdah's framework can be further enhanced through longer-term implementation, stronger instructional scaffolding, and integration with meaning-oriented language use approaches.

Another aspect that strengthens the interpretation of these findings is the highly positive student perception data regarding Dahdah-based instruction. These positive perceptions are not limited to visual appeal but are closely associated with learning experiences perceived as clearer and more structured. This suggests that Dahdah's framework contributes to reducing learning anxiety, a common issue in Arabic grammar instruction.²³ When grammatical rules are presented in a

²¹ Muhlis, Wachida, Muassomah Muassomah, Ibnu Hajar, Hasmiati Hasmiati, Rusdiana Rusdiana, Andi Muammar Kareba, and Nurfadillah Nurfadillah. "Enhancing Nahwu Mastery: Implementation of the Card Sort Method in Madrasah Aliyah." *Alsinatuna* 9, no. 2 (August 2024): 207–21. <https://doi.org/10.28918/alsinatuna.v9i2.2268>.

²² Bailey, Daniel, Norah Almusharraf, and Ryan Hatcher. "Finding Satisfaction: Intrinsic Motivation for Synchronous and Asynchronous Communication in the Online Language Learning Context." *Education and Information Technologies* 26, no. 3 (May 2021): 2563–83. <https://doi.org/10.1007/s10639-020-10369-z>.

²³ Chen, Yi-chen. "Effects of Technology-Enhanced Language Learning on Reducing EFL Learners' Public Speaking Anxiety." *Computer Assisted Language Learning* 37, no. 4 (May 2024): 789–813. <https://doi.org/10.1080/09588221.2022.2055083>.

concise and organized manner, learners tend to feel more confident in understanding and applying them. Consequently, these findings reveal a mutually reinforcing relationship between affective and cognitive dimensions in Arabic grammar learning.²⁴

From the perspective of Arabic grammar pedagogy, this study contributes by positioning Antoun Dahdah's linguistic framework as a form of reframing grammar instruction. Rather than functioning as an alternative method that replaces existing approaches, Dahdah's framework serves as a system for organizing grammatical rules that can be integrated into various explicit instructional strategies. Its primary value lies in presenting Arabic grammar as a coherent conceptual system, enabling learners to perceive interconnections among rules more holistically. This contribution expands the literature on Arabic grammar instruction by demonstrating that pedagogical innovation need not always involve new technologies or methods, but may also emerge from conceptual reorganization of existing grammatical knowledge.

Nevertheless, several limitations should be considered when interpreting the results. The relatively small sample size and the focus on a single institutional context limit the generalizability of the findings. Moreover, the study's focus on a specific set of grammatical topics does not permit conclusions regarding the effectiveness of Dahdah's framework across the entire Arabic grammatical system. Future research is therefore encouraged to examine the application of Dahdah's framework over longer instructional periods, across a wider range of grammatical topics, and in diverse institutional and educational contexts. Integrating Dahdah's framework with digital learning media also represents a promising direction for enhancing visual representation and instructional flexibility.

²⁴ Tari, Detri Kurnia, and Dadan Rosana. "Contextual Teaching and Learning to Develop Critical Thinking and Practical Skills." *Journal of Physics: Conference Series* 1233, no. 1 (June 2019): 012102. <https://doi.org/10.1088/1742-6596/1233/1/012102>.

Conclusion

This study demonstrates that the pedagogical application of Antoun Dahdah's linguistic framework exerts a positive and significant influence on Arabic grammar learning, specifically on the topics of *fi'l muḍāri' mansūb* and *majzūm* at MAN 1 Lamongan. Quantitative analysis revealed that students who learned through Dahdah's framework achieved significantly higher post-test scores than those who received conventional instruction, and exhibited learning gains categorized as moderately effective based on normalized gain analysis. These findings indicate that the visual and systematic organization of grammatical rules contributes meaningfully to the enhancement of learners' grammatical understanding.

Beyond improvements in learning outcomes, the study also found that students expressed highly positive responses toward Dahdah-based grammar instruction. These positive perceptions reflect learning experiences that were perceived as clearer, more structured, and easier to comprehend compared to conventional instruction. Accordingly, Dahdah's framework demonstrates pedagogical value not only in cognitive dimensions of Arabic grammar learning but also in affective aspects, particularly in fostering learner engagement and comfort.

Conceptually, the findings affirm that Antoun Dahdah's linguistic framework can be positioned as an effective pedagogical approach for reorganizing Arabic grammar instruction without introducing new grammatical rules. The framework functions as a representational system that assists learners in understanding relationships among form, function, and meaning in a more integrated manner. However, given the limitations of this study, including the relatively small sample size, the short duration of intervention, and the narrow instructional focus, the results should be interpreted with caution. Future research is recommended to explore the application of Dahdah's framework across broader grammatical domains, longer instructional durations, and varied educational contexts, including its integration with technology-enhanced learning environments.

REFERENCES

- Abdul Hamid, Mohd Fauzi, Muhammad Sabri Sahrir, Mohd Firdaus Yahaya, and Muassomah Muassomah. "Development of a Web-Based Interactive Infographic Module for Learning Arabic Grammar at a Malaysian University." *Journal of Education and Learning (EduLearn)* 19, no. 4 (2025): 2302–12. <https://doi.org/10.11591/edulearn.v19i4.22258>.
- Al-Maqableh, Naser, and Batool Al-Makhadmeh. "The Effects of the Collaborative Video-Based Flipped Learning Strategy on the Achievements in Arabic Grammar of 10th-Grade Female Students." *Theory and Practice in Language Studies* 14, no. 8 (2024): 2595–605. <https://doi.org/10.17507/tpls.1408.32>.
- Bailey, Daniel, Norah Almusharraf, and Ryan Hatcher. "Finding Satisfaction: Intrinsic Motivation for Synchronous and Asynchronous Communication in the Online Language Learning Context." *Education and Information Technologies* 26, no. 3 (2021): 2563–83. <https://doi.org/10.1007/s10639-020-10369-z>.
- Burhanuddin Yasin, Faisal Mustafa, Diva Safina, Yusri Yusuf, Khairuddin Khairuddin, and Barep Sarinauli. "Introducing Contextual Teaching and Learning as a Transition from Textbook-Based Curriculum to the National Curriculum." *European Journal of Educational Research* 12, no. 4 (2023): 1767–79. <https://doi.org/10.12973/eu-jer.12.4.1767>.
- Chen, Yi-chen. "Effects of Technology-Enhanced Language Learning on Reducing EFL Learners' Public Speaking Anxiety." *Computer Assisted Language Learning* 37, no. 4 (2024): 789–813. <https://doi.org/10.1080/09588221.2022.2055083>.
- Creswell, John W. *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. 4th ed. Boston: Pearson Education, 2012.
- Dörnyei, Zoltán, and Tatsuya Taguchi. *Questionnaires in Second Language Research*. London: Routledge, 2009. <https://doi.org/10.4324/9780203864739>.
- El-Dahdah, Antoine. *A Dictionary of Arabic Grammatical Nomenclature*. Beirut: Librairie du Liban Publishers, 1993.
- Ellis, Rod. "Current Issues in the Teaching of Grammar: An SLA Perspective." *TESOL Quarterly* 40, no. 1 (2006): 83–107. <https://doi.org/10.2307/40264512>.
- Eltahir, Mohd Elmagzoub, Najeh Rajeh Alsalhi, Sami Al-Qatawneh, Hatem Ahmad Al-Qudah, and Mazan Jaradat. "The Impact of

- Game-Based Learning (GBL) on Students' Motivation, Engagement and Academic Performance on an Arabic Language Grammar Course in Higher Education." *Education and Information Technologies* 26, no. 3 (2021): 3251–78. <https://doi.org/10.1007/s10639-020-10396-w>.
- Ferguson-Patrick, Kate. "Cooperative Learning in Swedish Classrooms: Engagement and Relationships as a Focus for Culturally Diverse Students." *Education Sciences* 10, no. 11 (2020): 312. <https://doi.org/10.3390/educsci10110312>.
- Hakmi Hidayat, and Hakmi Wahyudi. "Teaching Arabic Grammar in the Style of Antoine El Dahdah / *Ta'limu Qawā'id al-Lughah al-'Arabiyyah bi Uslūbi Antoine El Dahdah*." *Al-Manar: English and Arabic Journal* 10, no. 1 (2019): 49–74.
- Han, Feifei. "The Relations Between Motivation, Strategy Use, Frequency, and Proficiency in Foreign Language Reading: An Investigation with University English Language Learners in China." *SAGE Open* 11, no. 2 (2021). <https://doi.org/10.1177/21582440211008423>.
- Hake, Richard R. "Interactive-Engagement versus Traditional Methods: A Six-Thousand-Student Survey of Mechanics Test Data for Introductory Physics Courses." *American Journal of Physics* 66, no. 1 (1998): 64–74. <https://doi.org/10.1119/1.18809>.
- Holandyah, Muhamad, Dian Erlina, Lenny Marzulina, and Fitria Rembulan Ramadhani. "Grammar Instruction in Communicative Language Teaching Classrooms: Student Teachers' Perceptions." *Edukasi: Jurnal Pendidikan dan Pengajaran* (2021): 66–77. <https://doi.org/10.19109/ejpp.v8i1.8510>.
- Khasawneh, Najwa Ahmad Saleem. "The Effectiveness of a Flipped Classroom Strategy in Developing Grammatical Concepts among Fifth Grade Primary School Students." *European Journal of Educational Research* 11, no. 1 (2022): 207–16. <https://doi.org/10.12973/eu-jer.11.1.207>.
- Mahyudin Ritonga, Hendro Widodo, Munirah, and Talqis Nurdianto. "Arabic Language Learning Reconstruction as a Response to Strengthen Al-Islam Studies at Higher Education." *International Journal of Evaluation and Research in Education (IJERE)* 10, no. 1 (2021): 355–63.
- Midwah, Ali al-, and Mohammad T. Alhawary. "Arabic Diacritics and Their Role in Facilitating Reading Speed, Accuracy, and Comprehension by English L2 Learners of Arabic." *The Modern*

- Language Journal* 104, no. 2 (2020): 418–38.
<https://doi.org/10.1111/modl.12642>.
- Muhlis, Wachida, Muassomah Muassomah, Ibnu Hajar, Hasmianti Hasmianti, Rusdiana Rusdiana, Andi Muammar Kareba, and Nurfadillah Nurfadillah. “Enhancing Nahwu Mastery: Implementation of the Card Sort Method in Madrasah Aliyah.” *Alsinatuna* 9, no. 2 (2024): 207–21.
<https://doi.org/10.28918/alsinatuna.v9i2.2268>.
- Sweller, John, Stéphanie Roussel, and André Tricot. “Cognitive Load Theory and Instructional Design for Language Learning.” In *The Cambridge Handbook of Working Memory and Language*, edited by Peter A. Tremblay et al., 859–80. Cambridge: Cambridge University Press, 2022.
<https://doi.org/10.1017/9781108955638.045>.
- Tari, Detri Kurnia, and Dadan Rosana. “Contextual Teaching and Learning to Develop Critical Thinking and Practical Skills.” *Journal of Physics: Conference Series* 1233, no. 1 (2019): 012102.
<https://doi.org/10.1088/1742-6596/1233/1/012102>.
- Thurairasu, Vanitha. “Gamification-Based Learning as the Future of Language Learning: An Overview.” *European Journal of Humanities and Social Sciences* 2, no. 6 (2022): 62–69.
<https://doi.org/10.24018/ejsocial.2022.2.6.353>.
- Zulfa, Annida, Hamsi Mansur, Monry Fraick Nicky Gillian Ratumbusang, Martine Warren, and Terry Harris. “Developing an Innovative Board Game Using a Cooperative Learning Approach to Foster Interest in Learning Arabic.” *Alibbaa': Jurnal Pendidikan Bahasa Arab* 6, no. 1 (2025): 99–119.
<https://doi.org/10.19105/ajpba.v6i1.17834>.