

Project-Based Learning for Functional Arabic Writing Materials Development

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Received: 15/05/2025

Revised: 27/06/2025

Accepted: 09/08/2025

Abstract

This research and development aims to describe (1) project-based functional Arabic writing teaching materials, (2) validation results of teaching materials from material experts, linguists, and learning media experts, and (3) the effectiveness of the use of project-based functional Arabic writing teaching materials. The research method used R&D with the ADDIE model. The test subjects in this study were students of the Arabic language education program who were taking the Insha'2' 2 course. The results of this study show that (1) The textbook for writing functional Arabic with the title *Maahir fi al-Kitabah al-wadhliyyah* consists of six chapters of functional Arabic writing material. This book was developed through the five stages of the ADDIE model. (analysis, design, development, implementation, and evaluation). (2) The results of expert validation show that the textbooks have good quality and are suitable for use, both in terms of material (92%), language (80%), and learning media (78.77%). (3) The results of the effectiveness test of the use of functional Arabic writing textbooks showed a significant increase in student learning outcomes. This shows that using functional Arabic writing teaching materials has proven effective in improving student learning outcomes.

Keywords

Functional Arabic Writing; Project-Based Learning; Teaching Material Development

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1. INTRODUCTION

Writing is one of the essential skills in the digital era. Most communication today is carried out through written media (Syahputra, 2024). Among them are text messages via email and various other social media. Writing skills allow a person to communicate effectively through a variety of media. Having good writing skills can reduce the potential for misunderstandings that often occur due to poorly structured messages.

Writing is not just a string of letters and words. These skills involve a variety of other skills. Muradi defines writing as a skill in pouring ideas, images, or thoughts into the human mind to become a written work that can be read and easily remembered or understood by others (Rathomi, 2020).

One of the types of writing skills is functional writing. Muradi defines this type of writing as the realization of communication between people for certain purposes (Muradi, 2016). Functional writing is related to certain social situations, and its purpose is to connect people to meet each other and



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organize their affairs. Functional writing does not require fancy words or imagination. It is not wordy or repetitive, or attempt to reiterate ideas and information to confirm them. Instead, it has a specific purpose that it seeks to achieve in the shortest possible way. Functional writing has its recognizable patterns, and it has its particular methods and skills that set it apart from others (العزیز & يوسف, ٢٠٢٣; ع. ا. محمد, ٢٠٢٥).

Functional writing differs from creative writing, focusing on artistic expression and emotions. Functional writing focuses on clarity, accuracy, and order. Every word and sentence is carefully chosen to avoid ambiguity and ensure information is conveyed without distortion (م. ع. ا. محمد & سعد, ٢٠٢٥). The structure of the writing is also designed in such a way that readers can quickly find the information they need. Therefore, a deep understanding of the principles of effective communication is the primary foundation for producing quality functional writing.

However, the teacher and students face problems reaching the functional writing skill learning target. This problem came from various education factors. One of them comes from the use of teaching materials. Teaching materials are a set of teaching tools that contain teaching materials, methods, limits, and methods of evaluation designed systematically and attractively to achieve the required teaching goals, which is sub-competence in all its complexities (Kosasih, 2021). Teaching materials are one of the factors of the teaching process and play an essential role in the teaching process. In addition, students do not rely on the teacher's explanation only but can learn on their own. Diverse teaching materials that are appropriate to students' needs will significantly affect students' success in the teaching and learning process (Chusna & Bahrudin, 2022).

The availability of teaching materials is one of the problems that educational institutions face today. One institution facing the problem is the Department of Arabic Language Teaching at Ponorogo Islamic State University. From the preliminary studies conducted by the researcher and the personal interviews with the students, the researcher knew that teaching writing skills at this university was conducted using traditional methods. Modern learning methods involving critical thinking skills, creativity, communication, and collaboration have not been implemented optimally. The lack of concise learning materials compounds these problems. The teaching materials used by the teacher include the writing theories he delivered and his explanation of each lecture, although students need a different opportunity to understand the material. The students came from diverse schools and had different language proficiency. Students graduating from Islamic institutes and schools do not need a long time to understand the material. Students from public schools need a long time to understand it. Reading teaching materials outside the classroom will help them understand the material studied and upgrade their writing proficiency. This is difficult for students because of the lack of teaching materials.

Exercises were one of the important factors in upgrading writing proficiency (Hadijah, 2016). Due to the results of the worksheets of some students, the researcher knew that they had a writing problem. Students have made many mistakes in their writing. The teacher confirmed that some of them have weak writing skills. The teacher explained the materials and gave them various writing exercises; however, the teacher found common mistakes in their writing regarding meaning, structure, and writing. The teacher found these errors in daily exercises or exams and many of the theses written by students.

According to the data obtained by the researcher in the preliminary studies, the researcher saw that teaching writing at this university needs educational materials in which the elements of discovery, evaluation, interpretation, and synthesis of information are taught to produce forms from various projects as a result of the education process. The teacher will know how well the students' writing skills are developed from the projects obtained. One of the modern educational methods that benefits a lot today and is appropriate to solve these problems is the teaching and learning model based on projects. This model is a method in which projects or activities are used as teaching-learning aids. Students

discovered, evaluated, interpreted, and synthesized information to produce diverse learning outcomes (Andini & Rusmini, 2022; Jalil & Shobrun, 2023; Mahtumi et al., 2022).

Project-based teaching and learning are different from traditional methods. The main difference is that students discover the learning process themselves if they are provided with structure, resources, and guidance (Tinenti, 2018; Wulandari, 2016). Still, it is left to them to find out how to learn the material to the fullest. Whatever the students do by completing the project with the teacher, they will know how to learn independently and take responsibility (Mahtumi et al., 2022; Stanley, 2021). This educational model will allow students to participate in a practical activity in which they produce a product instead of evaluating paper. Many studies have shown the success of benefiting from the method of teaching and learning based on projects in upgrading the efficiency of students in the process of education in general and in teaching Arabic in particular. The first is that project-based learning is an appropriate way to reach education standards in the twenty-first century and upgrade the extent of education to the stage of higher thinking skills (Mufti, 2022). *Second*, this method successfully upgrades the students' competence in understanding the subject of the sentence and its application in writing different sentences, as well as their desire to teach writing (Hastang, 2018). *Third*, implementing project-based learning has proven effective in increasing student activity and achievement (Suseno et al., 2022). The fourth, that project-based learning can enhance student creativity (Taliak et al., 2024). And the fifth is that the implementation of project-based learning has been proven effective in improving students' social skills and collaborative environment between students (Ambara et al., 2023; Nahdiyah & Laili, 2024; Sa'diyah et al., 2023).

This study aims to answer three critical questions about developing project-based functional Arabic writing teaching materials. First, the development of project-based functional Arabic writing teaching materials. Second, the results of the validity test of the project-based functional Arabic writing teaching materials that have been developed. Third, the effectiveness of using project-based functional Arabic writing teaching materials in improving students' writing skills.

Many studies that are related to this theme. *First*, the development of writing skills teaching materials based on project-based learning for PBSI students at the Islamic University of Malang was written by Itznaniyah Umie Murniatie and Hasan Busri (Murniatie, 2021). *Second*, the development of teaching materials based on project-based learning to build scientific, creativity, and collaborative skills was written by Dila Triwahyu Ambara, Kartini Herlina, and Undang Rosidin (Ambara et al., 2023). *Ali Mofti wrote third, a third project-based learning to improve high-level thinking skills in Arabic learning* (Ali Mufti, 2022). *Fourth*, the development of teaching materials based on project-based learning models to enhance procedural text in writing skills was written by Endang Histaurina Sitanggang, Hasratuddin, and Juhana (Sitanggang, E. H., 2023). *Fifth*, developing basic English material based on project-based learning was written by Farid Helmi Setyawan and John Eppendi (Setyawan & Eppendi, 2023). From several studies, it is known that the use of project-based learning models has been widely used in various language skills learning and the development of teaching materials. However, its use has not been found in developing teaching materials for Arabic writing skills, especially functional ones.

2. METHODS

This study used the research and development (R&D) method. This type of research is used to develop a new product or improve an existing product that can be accounted for (Saputro, 2017). The approach used in this study is the ADDIE model developed by Dick and Carey (1996). The selection of this model is based on the consideration that this model is developed systematically and based on a theoretical foundation to solve the problems of educational institutions (Cahyadi, 2019; Rayanto & others, 2020). In this case, the a need for functional writing teaching materials that are under the needs and characteristics of users.

Sugiyono explained that the design of the ADDIE model contains five steps: analysis, design, development, implementation, and evaluation (Sugiyono, 2020). *First*, the analysis is the initial stage of the ADDIE model design. This activity aims to analyze the extent of the need to develop teaching materials. The analysis stage includes three activities: material analysis, needs analysis, and analysis of students' characteristics as users of teaching materials. The data obtained from the analysis is then analyzed and used as a reference to move on to the next step. *Second*, design. In this section, teaching materials are designed by paying attention to four important things: students as users, learning objectives, learning methods, and evaluation. *Third*, development. This round is intended to realize everything designed at the design stage into a prototype product development. *Fourth* is implementation. This part contains a test of the development prototype produced in the previous stage. This trial is intended to determine its use's effectiveness, attractiveness, and efficiency in learning activities. *Fifth*, evaluation. This activity is carried out to improve the development of the products produced.

The instruments used in collecting data for this research and development are questionnaires, tests, and interview guidelines. The analysis techniques used in this development research include quantitative and qualitative descriptive analysis. Quantitative descriptive analysis is used to process data obtained through questionnaires in the form of descriptive percentages. Meanwhile, qualitative descriptive analysis processes data from the results of reviews and interviews by grouping information into inputs, suggestions, responses, and criticisms. The results of this analysis are then used to improve the developed product.

3. FINDINGS AND DISCUSSIONS

Development of Functional Arabic Writing Teaching Materials Based on Project-Based Learning

The development of project-based functional Arabic writing teaching materials refers to the ADDIE model, which has five steps: analysis, design, development, implementation, and evaluation.

Analysis

The analysis stage includes material analysis, needs analysis, and student analysis. The material analysis is carried out so that the teaching materials developed can meet the competency standards of student abilities as set in the curriculum of the study program. Needs analysis is carried out to determine students' needs for teaching materials, including their expectations for the model of teaching materials they want to learn. Meanwhile, the analysis of students is carried out to determine the characteristics of students as objects of learning activities, where teaching materials will be used as teaching materials. The data in this analysis stage were obtained through literature and field studies.

The material analysis in this study includes the analysis of learning outcomes and the analysis of competencies each student must possess after completing one learning topic. To analyze learning outcomes and learning competencies, the researcher analyzed the curriculum documents of the study program. The main competency of graduates of the Arabic Language Education Program IAIN Ponorogo is to have expertise as an educator in the field of Arabic who is professional and has high moral and spiritual integrity at the formal education level. These competencies are described in three domains, namely the realm of attitude, the realm of knowledge, and the realm of skills. The Learning Outcomes of the Arabic Language Education Program include a deep mastery of Arabic structure, grammar, and vocabulary, and the ability to communicate orally and in writing well and correctly in various contexts. Lecturers present eight themes to fulfill these competencies. After the analysis, the material was overlapped and repeated from several themes presented.

The analysis of students' needs was carried out through field studies. The researcher provided several questions through a questionnaire to determine students' expectations regarding the textbook

to be developed. In addition to the instructions for using books and a clear explanation of learning objectives, there are several material criteria that students expect. The materials presented should be relevant to student life, easy to understand, able to motivate students to be active in learning activities, have appropriate illustrations, be equipped with examples relevant to the students' experience, and provide group learning activities. In addition, teaching materials should also be equipped with various kinds of exercises as evaluation materials.

The analysis of student characteristics was carried out through field studies. Of the 43 questionnaires that the respondents have filled out, it is known that 37 students (86%) come from Islamic-based schools. Meanwhile, six students (14%) came from public schools. Although there are students from public schools, they all have learned Arabic writing skills at the previous level of education. As for students' understanding of functional Arabic writing theory, four students (9.3%) stated that they understood, and 34 students (79.1%) stated that they understood the material a little. Five students (11.6%) stated that they did not understand. Based on this, the researcher considers it essential to include theories related to functional Arabic writing and its types as basic knowledge at the beginning of the textbook.

Design

After conducting the analysis, the next step is to design a systematics of teaching materials. The form of teaching materials developed is printed books. This teaching material format is still in greater demand than e-books. Cost, readability, availability, ease of recording, and use make printed books superior to electronic books (Khalid, 2014; Kisno & Sianipar, 2019). The researcher chose the format of printed books in developing functional Arabic writing teaching materials with several considerations: (1) the presentation of the material is presented systematically and interestingly including content, methods, evaluations that allow students to learn independently and are equipped with illustrations to help students understand; (2) the textbook presents a comprehensive explanation of the material consisting of definitions, classifications, procedures, and various kinds of examples that are relevant to student life; (3) The presentation of the material is adjusted to the level of student understanding.

At this stage, the activities carried out by the researcher are to design the front cover and back cover of the textbook, make a concept map of the teaching materials for each chapter, determine the material, practice questions, project assignments to be given, assess signs for each assignment, and bibliography. The first step in the design stage is to create a design for the textbook's front and back cover. On the front cover, the identity of the textbook is presented, consisting of the book's title, the developer's name, the place, and the year the textbook was developed. To attract students' attention as users, the front cover page is also equipped with engaging illustrations, and the textbook type is developed. An overview of the textbook's content and a brief biography of the author are presented on the back cover so that users can get a brief overview of the book's content to be studied. This book consists of 6 chapters that take two meetings to complete each chapter. The following are six chapters that will be used in the development of functional Arabic writing material with its learning objectives:

Tabel 1. List of material titles along with learning goals

Chapter	Title	Learning Objectives
1	<i>Kita>bah al-Bit}a>qah al-Taha>ny</i>	Students can write congratulatory cards in various events according to the correct linguistic rules
2	<i>Kita>bah al-Bit}a>qah al-Ta'azzy</i>	Students can write condolence cards by correct linguistic rules
3	<i>Kita>bah al-Muz}a>karah al-Shakhs}iyyah</i>	Students can write personal messages according to correct linguistic rules
4	<i>Kita>bah al-Muz}a>karah al-</i>	Students can write official messages by correct linguistic

Chapter	Title	Learning Objectives
	<i>Ida>riyah</i>	rules
5	<i>Kita>bah ar-Risa>lah ash-Shakhs>iyyah</i>	Students can understand and compose personal letter writing techniques
6	<i>Kita>bah ar-Risa>lah ar-Rasmiyyah</i>	Students can understand and compose personal letter writing techniques

Each chapter begins with the identity of the material, which is complemented by the expected learning outcomes, indicators, and an overview of the material. To get an overview of the material, the researcher presents several questions related to the material to be studied. These questions are connected to the student's experience. The material design of each chapter is adjusted to the needs of students and can develop three domains of student competence: cognitive, affective, and psychomotor. Differences in the level of student intelligence are also considered in the selection of materials so that all students can study and understand the material.

The assignment system in each chapter is combined with the project learning model. Using this model as the core of learning aims to encourage students' participation in understanding the learning objectives to be achieved. The reason for choosing the project-based learning model as the core of learning is because: (1) being able to create an active and collaborative learning atmosphere (Nahdiyah & Laili, 2024); (2) provide an authentic learning environment (Almulla, 2020); (3) proven effective in increasing students' motivation (Leuwol et al., 2023; Shin, 2018), creativity (Ramadhan & Hindun, 2023; Umam & Jiddiyyah, 2020), learning achievement (Rati et al., 2017), problem-solving skills (Chiang & Lee, 2016), critical thinking skills (Andini & Rusmini, 2022; Astri et al., 2022), and independent learning (Saputra & others, 2024).

There are three types of exercises in each chapter. The first exercise is related to the understanding of the material. The second exercise is are group project task. It aims to increase student learning motivation, learning achievement, cooperative ability, communication skills, ability to manage learning resources, critical thinking skills, and creativity. And the last exercise is individual projects, which are the final bill for each material. The design results obtained at this stage are used as a reference in the development stage of teaching materials.

Development

The development stage is carried out based on the design results obtained in the previous stage. This stage has several steps. *First*, collect materials from various sources. The type of material is adjusted to the characteristics and needs of students. The presentation is done by considering the level of difficulty of the material. *Second*, the creation of textbooks is carried out based on the systematics that have been determined at the design stage with the title *Ma>hir Fi> al-Kita>bah al-Waz>i>fiyah*. This book is A4 paper-sized and uses the Sakkal Majalla 16 typeface.



Figure 1. Front cover



Figure 2. Back cover



Figure 3. Learning Objectives

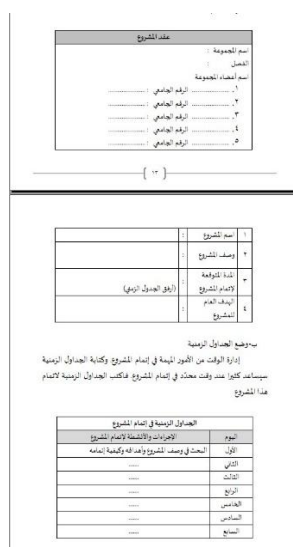


Figure 4. Learning activities in project



Figure 5. Learning activities in project evaluation



Figure 6. Learning activities in an individual project

Third, a validity test by three experts: material experts, linguists, and learning media experts. Data related to the review results of the textbook's quality by experts at this stage was obtained through a questionnaire. The average value of the validity test from 3 experts was 83.26%, indicating that the textbook developed was in a good category and suitable for use. The results of the assessment and suggestions of the experts are then analyzed and used as a reference in making improvements before the implementation stage.

Implementation

Implementation is a field trial stage of teaching material products that have been developed. Researchers have taken three steps at this stage. First, the organization of classes aims to ensure the availability of the required facilities in implementing field trials. This activity was carried out in the class of building C, Faculty of Tarbiyah and Teacher Training, IAIN Ponorogo. Second, a small-scale product trial was attended by 10 randomly selected students. In this small-scale trial, students achieved an average score of 74 on the post-test, an increase of 26.5 from the average score of 47.5 on the pre-test. Third, 25 4th-semester Arabic Language Education Program students at IAIN Ponorogo attended a large-scale product trial. The average post-test score obtained by students was 74.2, an increase of 21.8 from the average score in the pre-test of 52.4.

In addition to the trial that students attended, the researcher also asked for the assessment of teaching material products from the teaching lecturers, Insha'2. Each data in this trial stage was obtained through a questionnaire to determine the respondents' assessment of the quality of teaching materials. The researcher analyzes the assessment results and suggestions the respondents gave to be used as reference material at the next stage.

Evaluation

The evaluation stage in the research and development of the ADDIE model is carried out to determine the success rate of the teaching material products developed. The data at this stage is obtained through tests at the beginning and end of lectures. The pre-test was given at the beginning of the lecture before using the teaching material products. Meanwhile, the post-test was given after the use of teaching materials in lecture activities was completed. The difference in pre-test and post-test scores obtained by students was processed to determine the effectiveness of product use. The researcher conducts analysis and revision based on the results of the evaluation. The revision results at this stage are the final product of project-based functional writing teaching materials tested for feasibility and effectiveness.

Expert Validation Result

The validity test of the project-based functional Arabic writing teaching material development product was carried out by three experts. They are material expert, linguists, and learning media experts. The researcher provided functional Arabic writing teaching materials that had been developed for the three experts. Then, ask them to assess according to the rubric that has been provided.

The assessment of the teaching materials' validity in terms of material includes 15 points and is divided into five parts. These sections are instructions for using books, learning objectives, content of materials, assessments, and bibliographies. The validity test results were then analyzed using the content validity index formula. The following is a table of the validity test results from the functional Arabic writing teaching materials development product in terms of the material content:

Tabel 2. Validity test result from the material expert

Validator	Number of statements	Score	Maximum score	Scala Level of CVI	interpretation
Material expert	15	60	75	80	good

The data from the table above shows that 15 statements in the validity test questionnaire for developing functional Arabic writing teaching materials obtained a 60 out of a maximum score of 135. The content validity test results obtained a CVI value of 80%, so it is in the good category and suitable for use.

After scoring the product development of functional Arabic writing teaching materials, material experts also provide suggestions for improvement. The suggestions are as follows: 1) balancing the steps of the project-based learning model with the steps in learning Arabic writing. 2) Ensure each theme has clear learning objectives and indicators, easy-to-understand materials, proper exercises, and evaluations.

The assessment of the teaching materials' validity in terms of language includes 10 points and is divided into three parts. These sections are vocabulary and phrases, grammar, and writing techniques. The validity test results were then analyzed using the content validity index formula. The following is a table of the validity test results from the functional Arabic writing teaching materials development product in terms of language use:

Tabel 3. Validity test result from the linguist

Validator	Number of statements	Score	Maximum score	Scala Level of CVI	interpretation
Linguist	10	46	50	92	good

The data from the table above shows that 10 statements in the validity test questionnaire for functional Arabic writing teaching materials development obtained a score of 45 out of a maximum score of 50. The content validity test results obtained a CVI value of 92%, so it is in the very good category and suitable for use.

The linguist also provides suggestions for improvement after assessing the product development of functional Arabic writing teaching materials. The suggestions given are as follows: 1) correcting the use of inappropriate words and terms. 2) Correct sentence structure according to good and correct Arabic grammar rules. 3) Correcting errors in writing words and sentences.

The teaching materials' validity test from learning media experts includes 27 points divided into seven parts. These sections are the book's presentation, introduction, instructions for using the book, table of contents, learning objectives, exercises, and bibliography. The validity test results were then analyzed using the content validity index formula. The following is a table of the validity test results from the functional Arabic writing teaching materials development product in terms of learning media:

Tabel 4. Validity test result from the learning media expert

Validator	Number of statements	Score	Maximum score	Scala Level of CVI	interpretation
Learning media expert	27	105	135	78	good

The data from the table above shows that 15 statements in the validity test questionnaire for developing functional Arabic writing teaching materials obtained a 60 out of a maximum score of 135. The content validity test results obtained a CVI value of 80%, so it is in the good category and suitable for use.

After assessing the product development of functional Arabic writing teaching materials, material experts also provide suggestions for improvement. The suggestions are as follows: 1) add an interesting icon to each sub-chapter of the material. 2) Using cartoon images on the front cover of the textbook. 3) Add a summary of the contents of the book to the back cover of the book.

Effectiveness of Using Project-Based Functional Arabic Writing Materials

The development of project-based functional Arabic writing teaching materials has undergone feasibility tests by experts and field trials by course lecturers and students who take the Insha'2 course. Various expert suggestions have been used as a reference in improving teaching material products. The following are the results of field trials that have been carried out to determine the effectiveness of using project-based functional Arabic writing teaching materials in improving student learning outcomes. Based on the analysis of the results of field trials, it was concluded that the significance level of using project-based functional Arabic writing textbooks is very significant and influences improving students' Arabic writing learning outcomes.

The Paired Samples t-Test is used to determine if there is a significant difference between two measurements taken on the same subject, namely before (pre-test) and after (post-test), given treatment or intervention. This test is commonly used in experimental research to test the effectiveness of treatments. These trials are carried out on a small scale and a large scale.

The results of the Paired Samples t-Test in small-scale trials showed that there was a statistically

significant difference between pre-test and post-test scores. A calculated t-value of -10.695 with a degree of freedom (df) = 9 and a significance value (2-tailed) of 0.000 (< 0.05) indicates that the difference is significant. The average increase is 26.5 points, and the 95% confidence interval of the value difference ranges from -32.10490 to -20.89510, which does not include zero. This reinforces that the improvement in scores occurs noticeably after the treatment. So it can be concluded that the teaching materials provided effectively improve students' ability. The treatment applied has a positive influence on learning outcomes.

After conducting small-scale trials, the researchers continued with large-scale trials. Based on the results of the paired t-test for large-scale trials, a calculated t-value of -31.143 was obtained with a degree of freedom (df) = 24 and a significance value (2-tailed) of 0.000 (< 0.05). This shows a significant difference between the pre-test and post-test results. The average difference of -21,800 indicates that the post-test score is significantly higher than the pre-test score. The 95% confidence interval of the difference also excludes zero values (-23.24473 to -20.35527), reinforcing the conclusion that the difference is statistically significant. Thus, the treatment or intervention provided has been proven effective in improving learning outcomes.

In addition to taking measurements on the same subject, the researcher measured two subjects: the experimental and control classes. Before making the measurement, normality and homogeneity tests were carried out. Normality tests determine whether the data distribution in a group follows the normal distribution. One of the conditions in parametric testing, such as the t-test, is fulfilling the normality assumption. Normality tests were performed on data from the experimental and control groups using the Shapiro-Wilk method because the number of respondents was less than 50.

Based on the Shapiro-Wilk normality test results, a significance value of 0.220 was obtained for the experimental group and 0.240 for the control group. Since the significance values of both groups are greater than 0.05, it can be concluded that the data is normally distributed. Therefore, the normality assumption is met, and the data can be analyzed using parametric tests such as the t-test.

In addition to the normality test, a variance homogeneity test was also carried out to determine whether the two groups' variances had similarities (homogeneous). This test is important before parametric tests such as the Independent Samples t-Test. This analysis used the Levene test to test the variance similarity between the experimental and control groups.

Based on the results of the Levene test, the significance values of all approaches (mean, median, adjusted df , and trimmed mean) are greater than 0.05. The highest p-value is 0.569, and the lowest is 0.387. This shows no significant difference in variance between the experimental and control groups. Thus, the homogeneity of variance assumptions are met, so parametric analyses such as t-tests can be performed using the same variance assumptions.

After obtaining the results of the normality test and homogeneity test, the Independent Samples t-Test is used to find out if there is a significant difference between the two unrelated groups, namely the experimental group and the control group. This test was carried out on the data of post-test results after treatment or intervention was carried out in the experimental group. The results of the t-test showed a significance value (2-tailed) of 0.000 (< 0.05), which means that there was a significant difference between the experimental group and the control group. The experimental group had an average score of 12 points higher than the control group. The 95% confidence interval for the mean difference is between 8.78 to 15.22, which does not include zero values, reinforcing the conclusion that this difference is significant. This shows that using functional Arabic writing teaching materials has proven effective in improving student learning outcomes.

4. CONCLUSION

Teaching materials are one of the crucial elements in learning activities. Likewise, learning to write is one of the essential skills for today's digital era. Not only does it contain knowledge, but teaching materials should have elements that can improve the skills needed by students in their social lives. Project-based teaching materials are one of the solutions to improving students' functional Arabic writing skills. The use of project-based functional Arabic writing teaching materials is not only able to improve writing skills, but also able to increase critical thinking skills, creativity, collaboration, and communication skills.

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