

Project-Based Learning in Arabic Speaking Instruction: Examining the Role of Communicative Approach and Learner Personality Differences

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Abstract: Arabic language learning at the Madrasah level continues to face challenges, particularly in developing students' speaking skills, which are influenced by pedagogical approaches and learners' personality types. This study aims to examine the effect of Project-Based Learning (PjBL) using a communicative approach on Arabic speaking skills and to analyze differences in learning outcomes between extroverted and introverted students. The research employed a quasi-experimental design involving an experimental and a control group, with ninth-grade students of MTsN 1 Sijunjung selected through purposive sampling. Data were collected through pretest and posttest speaking assessments, classroom observations, and personality questionnaires using the Eysenck Personality Inventory. The findings reveal that students taught through PjBL demonstrated a significantly greater improvement in speaking skills compared to those taught using conventional methods. Statistical analysis confirmed a significant increase in the experimental group, while the control group showed no meaningful improvement. Furthermore, the PjBL-based communicative approach was effective for both extroverted and introverted learners. This study highlights the novelty of integrating PjBL with personality-based analysis and suggests its potential as an effective strategy for enhancing Arabic speaking proficiency across diverse learner characteristics.

INTRODUCTION

How is it possible that students spend years learning Arabic, yet remain unable to speak even simple sentences with confidence? This paradox reflects a deeper crisis in language education, where mastery is often reduced to memorization rather than meaningful communication¹. In many madrasahs, Arabic instruction remains dominated by teacher-centered practices that limit student interaction and suppress opportunities for authentic language use².

¹ H. I. Hajar dan H. A. Qohar, "Pendekatan inovatif untuk mengatasi tantangan pembelajaran nahwu dan sharaf bagi peserta didik," *Ranah Research* 6, no. 6 (2024): 2995-3009, <https://doi.org/10.38035/rj.v6i6.1473>.

² A. Rozali, D. M. Irianto, dan Y. Yuniarti, "Kajian Problematika Teacher Centered Learning dalam Pembelajaran Siswa," *Collase* 5, no. 1 (2022): 77-85, <https://doi.org/10.22460/collase.v5i1.9996>

Consequently, learners may achieve satisfactory academic scores, yet struggle to express ideas orally, indicating a significant gap between theoretical knowledge and communicative competence³.

Speaking skills are a fundamental component of language mastery, as they represent the ability to use language productively and interactively in real contexts⁴. However, evidence from classroom practices shows that students' speaking proficiency remains relatively low. This condition is influenced by several factors, including limited opportunities for practice, lack of student engagement, and learning environments that do not support active communication. Therefore, there is a pressing need for innovative instructional approaches that not only promote student participation but also create meaningful and contextual learning experiences.

One of the most vital skills in Arabic language acquisition is speaking skills, as it is productive, communicative, and serves as a primary indicator of functional language mastery⁵. However, reality in the field indicates that the Arabic speaking proficiency of students, including those at MTsN 1 Sijunjung, remains relatively low. This low proficiency is caused by various factors, including the dominance of teacher-centered conventional learning methods⁶, a lack of oral communication practice, minimal student engagement, and a learning environment that does not fully support real-world Arabic usage⁷. In fact, speaking skills demand continuous practice, two-way interaction, and a classroom atmosphere that is both communicative and psychologically safe⁸.

The Communicative Language Teaching (CLT) approach is viewed as an effective strategy for enhancing Arabic speaking skills because it emphasizes language use in real contexts through activities such as dialogues, role-plays, discussions, and presentations⁹. This approach becomes even more optimal when integrated with Project-Based Learning (PjBL), which encourages

³ M. Hatta, "Pola Pembelajaran Kreatif Komunikatif untuk Meningkatkan Kemampuan Berbicara Bahasa Arab," *MODELING: Jurnal Program Studi PGM*11*, no. 3 (2024): 260-274, <https://doi.org/10.69896/modeling.v11i3.2612>.

⁴ E. D. Rahmawati, "Pendekatan Komunikatif dalam Tes Kemampuan Berbicara Bahasa Arab," *Lugawiyat* 3, no. 1 (2021): 77-95, <https://doi.org/10.18860/lg.v3i1.12321>.

⁵ L. O. Nggawu dan N. T. P. Thao, "The Impact of Communicative Language Teaching (CLT) Approach on Students' Speaking Ability," *International Journal of Language Education* 7, no. 3 (2023), <https://doi.org/10.26858/ijole.v7i3.50617>.

⁶ A. Rozali, D. M. Irianto, dan Y. Yuniarti, "Kajian Problematika Teacher Centered Learning dalam Pembelajaran Siswa," *Collase* 5, no. 1 (2022): 77-85, <https://doi.org/10.22460/collase.v5i1.9996>.

⁷ S. Maidarlis, D. E. Hulawa, dan H. Wahyudi, "Analisis Faktor Kesulitan Pembelajaran Speaking Skills," *Muhadasah* 5, no. 2 (2023): 195-214, <https://doi.org/10.51339/muhad.v5i2.1499>.

⁸ M. I. N. Fadhilah dan Q. A. Jauhari, "Implementasi Pembelajaran Bahasa Arab Berbasis Praktik Langsung Pendekatan Communicative Language Teaching untuk Meningkatkan Kepercayaan Diri Siswa," *Maharaat Lughawiyat* 4, no. 1 (2025): 15-29, <https://doi.org/10.18860/jpba.v4i1.14824>.

⁹ M. Zulistia, "The Effectiveness of Arabic Contextual Teaching and Learning (CTL) Strategy," *Jurnal Al-Maqayis* 8, no. 2 (2021): 198-219, <https://doi.org/10.18592/jams.v8i2.4901>.

students to learn actively, collaboratively, and contextually through communication-based projects¹⁰.

Nevertheless, the effectiveness of a PjBL-based communicative approach cannot be separated from individual student characteristics, particularly introvert and extrovert personality types¹¹. Educational psychology studies show that extroverted students tend to be more active, confident, and responsive in oral communication activities, whereas introverted students are more reflective, cautious, and require more time and a supportive atmosphere to participate¹². These differences do not reflect intelligence levels but rather differences in learning styles and interaction preferences¹³. Unfortunately, most previous studies on the communicative approach and PjBL remain general and have not explicitly linked them to differences in student personality types, especially within the context of Arabic learning in madrasahs¹⁴. In fact, student-centered learning requires teachers to understand both the cognitive and affective aspects of students to ensure that learning is inclusive and adaptive.

In addition to internal factors, the success of the communicative approach is also influenced by external factors, such as teachers' pedagogical competence, the availability of communicative teaching materials, a conducive learning environment, and adequate time allocation¹⁵. On the other hand, although the Indonesian national curriculum (Curriculum 2013 and *Kurikulum Merdeka*) has directed Arabic learning toward more communicative and productive goals, a gap remains between curriculum policy and classroom implementation¹⁶.

Based on these conditions, there is an urgent need for research that systematically examines the effectiveness of the PjBL-based communicative

¹⁰ O. Widiastuti et al., "CALL-Mediated Project-Based Language Teaching: A Speaking Project with Online Audiences in Indonesia," *Indonesian Journal of Applied Linguistics* 12, no. 1 (2022): 232-242, <https://doi.org/10.17509/ijal.v12i1.46427>.

¹¹ E. Amalia et al., "Interactive Communication Strategies to Support the Implementation of Multidimensional Literacy and Language Education in Inclusive Settings for Achieving Sustainable Development Goals (SDGs)," *International Journal of Language Education* 9, no. 3 (2025): 619-631, <https://doi.org/10.26858/ijole.v1i1.77400>.

¹² M. U. Azmy dan A. Munip, "Kepribadian Ekstrovert-Introvert dalam Kelancaran Berbicara Bahasa Arab: Analisis Konten dalam Perspektif Psikolinguistik," *Lisanan Arabiya: Jurnal Pendidikan Bahasa Arab* 9, no. 1 (2025): 32-50, <https://doi.org/10.32699/liar.v9i1.9537>.

¹³ R. Rudianti et al., "Proses Berpikir Kritis Matematis Siswa Ditinjau dari Tipe Kepribadian Ekstrovert dan Introvert," *Jurnal Pendidikan Matematika* 10, no. 3 (2021), <https://doi.org/10.31980/mosharafa.v10i3.675>.

¹⁴ R. Mulyana et al., "Strategi Guru dalam Meningkatkan Keberanian Berpendapat Siswa," *Journal of Education, Cultural and Politics* 5, no. 1 (2025): 94-100, <https://doi.org/10.24036/jecco.v5i1.615>.

¹⁵ S. Mulazamah, "Peningkatan Efektivitas Pengajaran Bahasa Arab melalui Pendekatan Komunikatif," *Al-Mikraj Jurnal Studi Islam dan Humaniora* 4, no. 2 (2024): 1183-1190, <https://doi.org/10.37680/almikraj.v4i02.5149>.

¹⁶ O. Widiastuti et al., "CALL-Mediated Project-Based Language Teaching: A Speaking Project with Online Audiences in Indonesia," **Indonesian Journal of Applied Linguistics** 12, no. 1 (2022): 232-242, <https://doi.org/10.17509/ijal.v12i1.46427>.

approach in teaching speaking skills¹⁷. Based on the reviewed literature, it can be concluded that Project-Based Learning (PjBL) and the Communicative Language Teaching (CLT) approach are effective in enhancing students' speaking skills, particularly in fostering fluency, confidence, and meaningful communication¹⁸. Additionally, personality traits, especially introversion and extroversion, significantly influence students' participation and learning outcomes in speaking activities¹⁹. While extroverted learners tend to be more active and expressive, introverted learners require more structured and supportive learning environments to achieve optimal performance²⁰.

However, previous studies have largely examined these aspects separately, with limited research integrating instructional approaches and personality differences within a single framework, particularly in the context of Arabic language learning²¹. Furthermore, research focusing specifically on speaking skills remains relatively scarce. Based on these conditions, there is an urgent need for research that systematically examines the effectiveness of the PjBL-based communicative approach in teaching speaking skills by considering the differences between introverted and extroverted personality types²². Therefore, this study aims to fill this gap by providing a more comprehensive understanding of how integrated instructional strategies can enhance Arabic speaking skills while accommodating diverse learner characteristics²³.

This research is expected to contribute theoretically to the development of more personalized and adaptive Arabic language learning, as well as practically for teachers and educational institutions in designing communicative and inclusive instructional strategies²⁴. Thus, this study is directed at addressing the existing research gap and providing a

¹⁷ B. M. R. Bustam et al., *Inovasi Pendekatan Komunikatif Berbasis Project Based Learning (PjBL) Bahasa Arab Berbasis Pemanfaatan Teknologi* (Yogyakarta: UAD Press, 2024).

¹⁸ L. Ashila, M. F. Sya, dan W. K. Dalilah, "Penerapan Metode Community Language Teaching dalam Meningkatkan Kemampuan Bahasa Inggris Siswa," *Karimah Tauhid* 3, no. 7 (2024): 8090-8099, <https://doi.org/10.30997/karimahtauhid.v3i7.14172>.

¹⁹ N. M. D. Erfiani, Y. O. L. Awololon, dan I. R. Hardika, "The Extrovert-Introvert Personality and Their Second Language Acquisition," *Santhet (Jurnal Sejarah Pendidikan dan Humaniora)* 8, no. 2 (2024): 2504-2509, <https://doi.org/10.36526/santhet.v8i2.4706>.

²⁰ S. A. Ginting, "Syntactic Complexity on Extroverted and Introverted Learners' Written Products," *International Journal of Education and Literacy Studies* 6, no. 4 (2018): 65-70, <https://doi.org/10.7575/aiac.ijels.v.6n.4p.101>.

²¹ 16. A. Komarudin, Y. R. Uyuni, dan M. Muizzuddin, "Pendekatan CTL sebagai strategi meningkatkan motivasi belajar siswa dalam pembelajaran bahasa Arab," *Uktub: Journal of Arabic Studies* 5, no. 1 (2025): 153-163, <https://doi.org/10.32678/uktub.v5i1.9>.

²² A. Istichori et al., "Pengaruh tipe kepribadian ekstrovert dan introvert terhadap kemandirian anak," dalam *Prosiding Seminar Nasional Pendidikan STKIP Kusuma Negara III* (2020).

²³ M. N. Kayaoglu, "Impact of Extroversion and Introversion on Language-Learning Behaviors," *Social Behavior and Personality* 41, no. 5 (2013): 819-826, <https://doi.org/10.2224/sbp.2013.41.5.819>

²⁴ K. Lichtman dan B. VanPatten, "Was Krashen Right? Forty Years Later," *Foreign Language Annals* 54, no. 2 (2021): 283-305, <https://doi.org/10.1111/flan.12552>

comprehensive overview of effective, contextual, and relevant Arabic learning practices in response to 21st-century educational challenges²⁵. This approach allows for an evaluation not only of the general effectiveness of the PjBL-based communicative approach in improving speaking skills but also of the influence of individual personality traits²⁶. Consequently, the findings are expected to provide objective, systematic, and relevant insights for both the development of Arabic learning practices in madrasahs and pedagogical theory that considers students' psychological factors, specifically in creating inclusive, adaptive, and student-centered learning environments²⁷.

Building upon these gaps, this study not only examines the effectiveness of integrating Project-Based Learning (PjBL) with the Communicative Language Teaching (CLT) approach in improving Arabic speaking skills, but also explores how this integration interacts with students' personality traits²⁸. By incorporating both pedagogical and psychological perspectives, this research seeks to provide a more comprehensive understanding of language learning processes in the context of madrasah education.

Moreover, this study responds to the increasing need for instructional approaches that are not only effective but also inclusive and adaptive²⁹. By addressing the interplay between teaching strategies and individual learner differences -particularly introversion and extroversion- the findings are expected to offer practical insights for teachers in designing communicative learning environments that accommodate diverse student characteristics³⁰. Ultimately, this research contributes to bridging the gap between curriculum expectations and classroom implementation by proposing an integrated, student-centered learning approach³¹. It also enriches the theoretical discourse on Arabic language pedagogy by emphasizing the importance of combining

²⁵ A. S. Marpaung, "Penerapan CLT terhadap Keterampilan Berbicara Siswa," *Jurnal Pendidikan Sang Surya* 10, no. 2 (2024): 550–561, <https://doi.org/10.56959/jpss.v10i2.288>

²⁶ R. A. Rahman et al., "Simplifikasi Project-Based Learning (PjBL) Berdiferensiasi dalam Pembelajaran Bahasa Arab," *El-Syaker* 1, no. 2 (2024): 67–78, <https://doi.org/10.64093/esijls.v1i2.25>

²⁷ N. Kurniawati, "Understanding Krashen Hypothesis of Second Language Acquisition," *International Journal of Language Education and Culture Review* 7, no. 1 (2021): 83–89, <https://doi.org/10.21009/IJLECR.071.08>.

²⁸ Yuliasari, Moch Wahib Dariyadi, Laily Maziyah, dan Muhammad Alfian, "Project-based Learning for Arabic Instruction as an Innovation of the Kurikulum Merdeka Development," *Inovasi Kurikulum* 22, no. 3 (2025): 1315–1328. <https://doi.org/10.64014/jik.v22i3.114>

²⁹ . Muhammad Tareh Aziz, "Project-Based Curriculum Approach in Arabic Language Learning: Case Studies and Best Practices," *Journal of Practice Learning and Educational Development* 5, no. 1 (2025): 32–38. <https://doi.org/10.58737/jpled.v5i1.323>

³⁰ Novita Maula Salsabila dan Agung Setiyawan, "Metode Project Based Learning dalam Pembelajaran Bahasa Arab Perspektif Psikolinguistik," *Journal of Arabic Education and Linguistics* 4, no. 1 (2024): 1–13. <https://doi.org/10.24252/jael.v4i1.48530>

³¹ Abdul Muid, Muhammad Fadhlhan, Rasidin, dan Muhammad Dasrul Jabir, "Project-Based Learning Models Approach in Improving Arabic Speaking Ability," *An Nabighoh* 24, no. 1 (2022): 17–32. <https://doi.org/10.32332/an-nabighoh.v24i1.4559>

communicative, project-based, psycholinguistic perspectives in fostering meaningful and sustainable language acquisition.

METHOD

This study was conducted at MTsN 1 Sijunjung, which was deliberately selected as the research site due to the persistent problem of low Arabic speaking proficiency among students despite formal instruction. This setting represents a typical *madrasah* context where teacher-centered approaches are still dominant, limiting students' opportunities for communicative practice. Therefore, it provides a relevant context for examining the effectiveness of innovative learning approaches. The case of this study focuses on the implementation of a Project-Based Learning (PjBL)-based communicative approach in Arabic language instruction. The unit of analysis consists of ninth-grade students' speaking skills, particularly in terms of fluency, accuracy, and confidence, as well as differences based on introvert and extrovert personality types³².

This research employs a quantitative approach with a quasi-experimental design, specifically the nonequivalent control group design³³. The study uses both primary and secondary data³⁴. Primary data were obtained directly from students' speaking performance, classroom observations, interviews, and personality questionnaires, while secondary data were derived from supporting documents such as curriculum materials, lesson plans, and relevant academic references.

The sources of information in this study include students as respondents, particularly those in the experimental and control classes, and the Arabic language teacher as a key informant who provided contextual insights into the teaching and learning process. In addition, documents such as instructional materials, scoring rubrics, and school records were used to support data triangulation and strengthen the validity of the findings. The sample was selected using a cluster random sampling technique to ensure relatively equivalent characteristics between groups in terms of academic ability, number of students, instructional time, and teacher. The final sample consisted of 31 students in the experimental class and 26 students in the control class. To identify students' personality types as a moderating variable, the Eysenck Personality Inventory (EPI) was administered. This instrument had been

³² N. Kosim et al., "The Use of the Task-Based Language Teaching (PjBLT) Method to Improve Learning Outcomes of Arabic Language Skills," *Alibbaa'* 5, no. 2 (2024): 144-165, <https://doi.org/10.19105/ajpba.v5i2.14804>.

³³ G. Adnan dan M. A. Latief, *Metode Penelitian Pendidikan: Penelitian Kuantitatif, Penelitian Kualitatif, Penelitian Tindakan Kelas* (Jakarta: Erhaka Utama, 2020).

³⁴ A. Mufti, "Project-Based Learning untuk Meningkatkan Kemampuan Berpikir Tingkat Tinggi," *Al-Ma'rifah* 19, no. 1 (2022): 13-22, <https://doi.org/10.21009/almakrifah.19.01.02>

adapted and tested for validity and reliability, and it was used to classify students into introvert and extrovert categories³⁵.

The data collection process was carried out through several systematic techniques. First, speaking performance tests were administered in the form of pre-tests and post-tests to measure students' initial and final speaking abilities. Second, classroom observations were conducted to examine students' engagement, participation, and communicative interaction during the learning process. Third, interviews with the teacher were conducted to obtain deeper insights into instructional practices, classroom conditions, and student responses. Fourth, a personality questionnaire (EPI) was used to identify students' personality types³⁶. Finally, documentation was collected to support and validate the data obtained from other sources. The speaking tests were designed based on functional communication principles aligned with the PjBL approach and were assessed using a performance rubric covering vocabulary mastery, grammatical accuracy, speaking fluency, confidence in expressing ideas, and content relevance, ensuring objective and consistent evaluation.

The implementation of the research consisted of three main stages: preparation, implementation, and evaluation. The preparation stage included preliminary observation, identification of classroom conditions, and instrument validation, followed by the administration of a pre-test to determine students' baseline abilities. The implementation stage involved the application of the PjBL-based communicative approach over four instructional meetings, incorporating activities such as group discussions, dialogue simulations, role-plays, interviews, and project-based presentations. The evaluation stage consisted of administering a post-test to assess the improvement in students' speaking skills after the treatment.

Data analysis was conducted using both descriptive and inferential statistical techniques with the assistance of SPSS software. Descriptive statistics were used to present data distribution, mean scores, and standard deviations of students' speaking performance. Inferential analysis began with prerequisite tests, namely the Shapiro-Wilk test for normality and Levene's test for homogeneity of variance. After the assumptions were met, hypothesis testing was conducted using paired sample t-tests to examine differences between pre-test and post-test scores within groups, and independent sample t-tests to analyze differences between the experimental and control groups, as well as between introverted and extroverted students. If the data did not meet

³⁵ A. Merry, F. Fatoni, dan M. Mutia, *Software Tes Kepribadian Eysenck* (2022).

³⁶ S. L. Lockhart et al., "Personal Protective Equipment (PPE) for Both Anesthesiologists and Other Airway Managers," *Canadian Journal of Anesthesia* (2020), <https://doi.org/10.1007/s12630-020-01673-w>

parametric assumptions, the Wilcoxon Signed-Rank Test was employed as a non-parametric alternative.

RESULT AND DISCUSSION

The research was conducted at MTsN 1 Sijunjung during the 2025/2026 academic year with ninth-grade students as subjects. The experimental class consisted of 31 students (8 extroverts and 23 introverts), while the control class consisted of 26 students (7 extroverts and 19 introverts). The instructional material focused on Arabic speaking skills with themes adjusted to the basic competencies of the curriculum. Prior to the treatment, all students participated in a pre-test to assess initial proficiency and identified their personality types using the Eysenck Personality Inventory (EPI), which had undergone validity and reliability testing.

General Effectiveness of the PjBL-Based Communicative Approach

The experimental class received PjBL-based instruction that integrated dialogues, role-plays, conversation simulations, group project work, and project presentations. In contrast, the control class utilized conventional learning involving lectures and guided exercises. The research data, comprising pre-test and post-test scores as well as observations of student communication activities, were analyzed to assess the overall effectiveness of the PjBL-based communicative approach and its impact based on personality types.

Table 1. Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|----|---------|---------|-------|----------------|
| PRETEST | 57 | 30 | 70 | 50.02 | 9.107 |
| POSTTEST | 57 | 45 | 88 | 67.40 | 11.939 |
| Valid N (listwise) | 57 | | | | |

Descriptive analysis revealed an increase in the overall average pre-test score from 50.02 to 67.40 in the post-test, with standard deviations of 9.107 and 11.939, respectively. These results indicate a descriptively significant improvement in learning achievement. The normality test using the Shapiro-Wilk method showed that the data for all groups were normally distributed, while Levene's homogeneity test indicated that the data variance was homogeneous; thus, the assumptions for parametric analysis were satisfied. However, to determine whether this improvement was statistically significant, the analysis proceeded to prerequisite testing (normality and homogeneity) followed by hypothesis testing.

The normality test was conducted to determine whether the learning outcome data for speaking skills in both the experimental and control classes followed a normal distribution. Normality is a prerequisite for parametric

statistical analysis. The tests were performed using both Kolmogorov-Smirnov and Shapiro-Wilk. Since the sample size for each group was less than 50 ($n < 50$), the normality decision was based on the Shapiro-Wilk significance value. The decision criteria are as follows: if $Sig. > 0.05$, the data are normally distributed; if $Sig. < 0.05$, the data are not normally distributed.

Table 2. Tests of Normality

| | Class | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|----------|-------|---------------------------------|----|-------|--------------|----|------|
| | | Statistic | Df | Sig. | Statistic | Df | Sig. |
| PRETEST | 1 | .164 | 31 | .032 | .946 | 31 | .121 |
| | 2 | .112 | 26 | .200* | .981 | 26 | .903 |
| POSTTEST | 1 | .141 | 31 | .120 | .939 | 31 | .076 |
| | 2 | .147 | 26 | .157 | .978 | 26 | .835 |

The Shapiro-Wilk significance values for the pre-test were 0.121 for the experimental class and 0.903 for the control class. Since both values are > 0.05 , the pre-test data are normally distributed. For the post-test, the significance values were 0.076 for the experimental class and 0.835 for the control class; both are also > 0.05 , indicating that the post-test data follow a normal distribution. Consequently, all data satisfy the assumption of normality, allowing the analysis to proceed to the homogeneity test.

The homogeneity test was conducted to determine the equality of variance between the experimental and control classes. This test was performed using Levene's Test for Equality of Variances. The decision criteria are as follows: if $Sig. > 0.05$, the variances are homogeneous; if $Sig. \leq 0.05$, the variances are not homogeneous.

Table 3. Homogeneity of Variance Test

| | | Levene's Test for Equality of Variances | |
|----------|-------------------------|---|------|
| | | F | Sig. |
| PRETEST | Equal variances assumed | .890 | .350 |
| POSTTEST | Equal variances assumed | .113 | .738 |

The significance value for the homogeneity test on the pre-test was 0.350 (> 0.05), indicating that the pre-test variances are homogeneous. For the post-test, the significance value was 0.738 (> 0.05), showing that the post-test variances are also homogeneous. Consequently, the data satisfy the assumption of homogeneity of variance and are eligible for analysis using parametric tests. In the Independent Samples t-test, interpretations are made by referring to the "Equal variances assumed" row.

Since the data met the assumptions of normality and homogeneity, hypothesis testing was conducted using the Independent Samples t-test. The test was performed on the pre-test data to ensure the equivalence of initial

abilities and on the post-test data to evaluate the differences in outcomes after the treatment.

Table 4. Group Statistics

| | CLASS | N | Mean | Std. Deviation | Std. Error Mean |
|----------|-------|----|-------|----------------|-----------------|
| PRETEST | 1 | 31 | 48.74 | 9.494 | 1.705 |
| | 2 | 26 | 51.54 | 8.557 | 1.678 |
| POSTTEST | 1 | 31 | 73.13 | 8.294 | 1.490 |
| | 2 | 26 | 61.46 | 8.325 | 1.633 |

The average pre-test scores for the experimental class (48.74) and the control class (51.54) show a relatively small difference. This indicates that the initial abilities of both groups were at a relatively equivalent level. In the post-test, the average score for the experimental class increased to 73.13, while the control class reached 61.46. Descriptively, the experimental class achieved higher results following the implementation of the PjBL-based communicative approach.

The statistical hypotheses tested are as follows: H_0 , There is no significant difference between the speaking skills learning outcomes of students in the experimental class and the control class. H_1 : There is a significant difference between the speaking skills learning outcomes of students in the experimental class and the control class. **Decision Criteria:** If the $Sig. (2-tailed) < 0.05$, then H_0 is rejected.

Table 5. Decision Criteria

| Variable | Condition | t | df | Significance One-Sided p | Significance Two-Sided p | Mean Difference | Std. Error Difference | 95% Confidence Interval (Lower) | 95% Confidence Interval (Upper) |
|----------|-----------------------------|--------|--------|--------------------------|--------------------------|-----------------|-----------------------|---------------------------------|---------------------------------|
| PRETEST | Equal variances assumed | -1.158 | 55 | .126 | .252 | -2.797 | 2.415 | -7.636 | 2.042 |
| | Equal variances not assumed | -1.169 | 54.690 | .124 | .248 | -2.797 | 2.392 | -7.592 | 1.999 |
| POSTTEST | Equal variances assumed | 5.281 | 55 | <.001 | <.001 | 11.667 | 2.209 | 7.240 | 16.095 |
| | Equal variances not assumed | 5.279 | 53.216 | <.001 | <.001 | 11.667 | 2.210 | 7.235 | 16.100 |

The independent samples t-test conducted on the pre-test yielded a \$Sig. (2-tailed)\$ value of 0.252, indicating that both groups were at a relatively equivalent initial state. For the post-test, the \$Sig. (2-tailed) < 0.001\$ confirms a significant difference between the experimental and control classes. With the experimental class's post-test average of 73.13 being notably higher than the control class's 61.46, the results demonstrate that the implementation of PjBL based on a communicative approach significantly enhances students' Arabic speaking skills.

Table 6. Paired Samples Statistics (Introverted Students)

| Variable | Mean | N | Std. Deviation | Std. Error Mean |
|-----------|-------|----|----------------|-----------------|
| Pre-test | 47.48 | 23 | 9.050 | 1.887 |
| Post-test | 71.13 | 23 | 7.244 | 1.511 |

Table 7. Paired Samples Test (Introverted Students)

| Comparison (Pre-test - Post-test) | Mean Difference | Std. Deviation | Std. Error Mean | 95% CI Lower | 95% CI Upper | t | df | Sig. (1-tailed) |
|-----------------------------------|-----------------|----------------|-----------------|--------------|--------------|---------|----|-----------------|
| Pair 1 | -23.650 | 3.024 | 1.069 | -26.756 | -20.549 | -15.805 | 22 | < 0.001 |

Based on Table 7, the average pre-test score for extroverted students was 52.38, which increased to 78.88 in the post-test. This mean increase of 26.50 indicates a high level of improvement in learning achievement descriptively.

The differences between introverted and extroverted personality types

The results of the paired samples t-test showed a t-value of \$-24.788\$, with degrees of freedom \$(df) = 7\$, and a \$Sig. (2-tailed) < 0.001\$. Since the \$Sig. < 0.05\$, \$H_0\$ is rejected and \$H_1\$ is accepted. This signifies a significant difference between the pre-test and post-test scores of *speaking skills* for extroverted students following the implementation of the communicative approach through the PjBL model.

Table 8. Paired Samples Statistics (Extroverted Students)

| Variable | Mean | N | Std. Deviation | Std. Error Mean |
|-----------|-------|----|----------------|-----------------|
| Pre-test | 47.48 | 23 | 9.050 | 1.887 |
| Post-test | 71.13 | 23 | 7.244 | 1.511 |

Table 9. Paired Samples Test (Extroverted Students)

| Comparison (Pre-test - Post-test) | Mean Difference | Std. Deviation | Std. Error Mean | 95% CI Lower | 95% CI Upper | t | df | Sig. (1-tailed) |
|-----------------------------------|-----------------|----------------|-----------------|--------------|--------------|---------|----|-----------------|
| Pair 1 | -26.500 | 3.024 | 1.069 | -29.028 | -23.972 | -24.788 | 7 | < 60.001 |

The average pre-test score for introverted students was 47.48, which increased to 71.13 in the post-test. This mean increase of 23.65 indicates a substantial descriptive improvement in learning achievement.

The results of the paired samples t-test yielded a t-value of -15.805 , with degrees of freedom $(df) = 22$, and a $\text{Sig. (2-tailed)} < 0.001$. Since the $\text{Sig.} < 0.05$, H_{0} is rejected and H_{1} is accepted, signifying a significant difference between the pre-test and post-test scores of *speaking skills* for introverted students following the implementation of the PjBL-based communicative approach. Furthermore, the 95% confidence interval of the difference ranges from -26.756 to -20.549 . Since the entire range lies below zero, it indicates a consistent improvement and reinforces that the observed changes were not due to chance.

In order to facilitate a clearer understanding of the relationship between the identified learning problems, the applied instructional approach, and the resulting outcomes, the following conceptual framework is presented. This framework illustrates how memorization-based learning and lack of contextualization contribute to low communication skills. It also shows how the integration of Project-Based Learning (PjBL) and the communicative approach serves as a strategic solution to create meaningful, interactive, and context-based learning experiences.

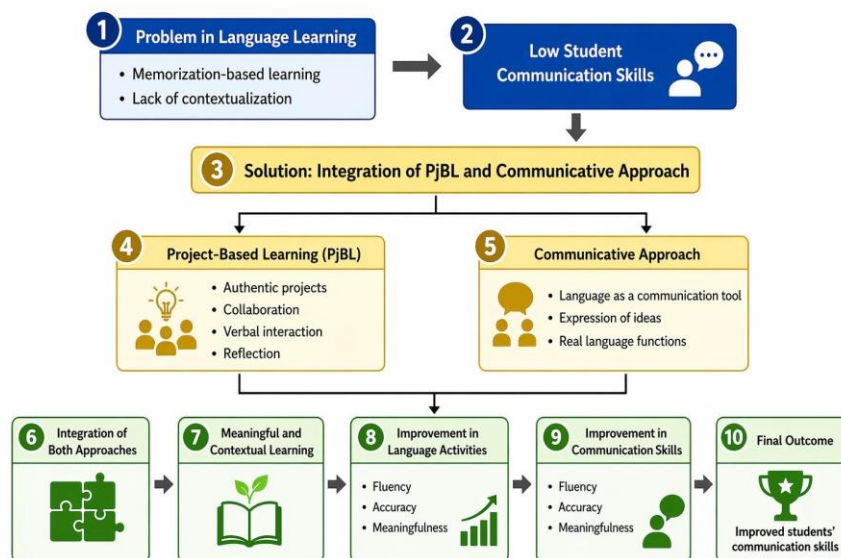


Figure 1. Conceptual Framework of Integrating PjBL and Communicative Approach

The research findings indicate that the effectiveness of the PjBL-based communicative approach is driven by several key factors. First, the integration of Project-Based Learning (PjBL) allows students to engage in authentic projects that demand continuous verbal interaction, collaboration, and reflection, making the learning experience meaningful and contextual. Second, the communicative approach emphasizes the use of language as a real communication tool; thus, students do not merely imitate language mechanically but learn to express ideas functionally.

These findings are consistent with Jack C. Richards, who shows that communicative learning enhances students' confidence, active participation, and expression of ideas. Similarly, David Nunan emphasizes that interactive methods such as role-plays and group discussions improve fluency, accuracy, and confidence. Furthermore, the findings support the view of H. Douglas Brown, demonstrating the effectiveness of the communicative approach in developing speaking skills across different languages. This indicates that its pedagogical principles are universal and applicable to both Arabic and other foreign language contexts.³⁷

The findings of this study demonstrate that the implementation of a Project-Based Learning (PjBL)-based communicative approach significantly improves students' Arabic speaking skills. This improvement is not only reflected in the increase in post-test scores but also in students' ability to express ideas more fluently, confidently, and meaningfully. These results indicate that learning environments which emphasize authentic communication, collaboration, and active engagement play a crucial role in developing speaking competence.

From a pedagogical perspective, the effectiveness of this approach can be attributed to two main factors. First, PjBL facilitates meaningful learning by engaging students in authentic tasks that require continuous verbal interaction, collaboration, and problem-solving. This aligns with constructivist learning theory, where knowledge is actively constructed through experience and social interaction. Second, the communicative approach positions language as a functional tool for expressing meaning rather than merely a system of rules to be memorized. As a result, students develop the ability to use Arabic in real communicative contexts rather than simply reproducing linguistic forms.

These findings are consistent with previous studies which indicate that communicative and project-based approaches enhance students' fluency, confidence, and participation. However, this study extends prior research by demonstrating that the effectiveness of such approaches is not limited to a particular type of learner. The results show that both extroverted and introverted students experience significant improvement, although through different learning pathways. Extroverted students tend to benefit from intensive social interaction, which increases their verbal participation and spontaneity in communication. In contrast, introverted students benefit from structured activities, reflective opportunities, and small-group interactions that provide a psychologically safe environment for expression.

³⁷ Tasliah Albina Nasution, *The Effect of Communicative Language Teaching (CLT) Method on Students' Speaking Ability at Grade XI SMA N 5 Padangsidempuan* (undergraduate thesis, UIN Syekh Ali Hasan Ahmad Addary Padangsidempuan, 2025).

This finding is particularly important as it challenges the common assumption that communicative approaches primarily favor extroverted learners. Instead, the results suggest that when instructional design is inclusive and adaptive, communicative learning can effectively support diverse learner characteristics. Therefore, the success of the approach lies not only in the method itself but also in how it is implemented to accommodate students' psychological differences. In order to illustrate how the PjBL-based communicative approach accommodates different personality types, Figure 2 presents the interaction between instructional strategies and learner characteristics.

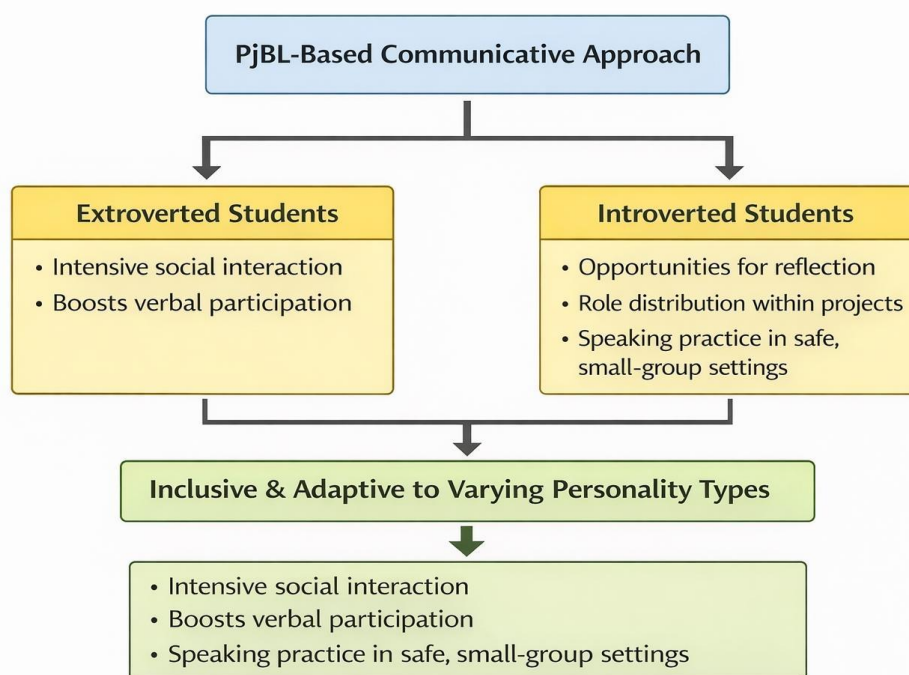


Figure 2. PjBL-Based Communicative Approach on Personality Types.

The results of this study not only support the viability of combining PjBL with CLT but also shed light on the reasons why communicative, project-based learning tackles a problem that has existed in the Arabic language education arena for a while now. Traditionally the teaching of Arabic has been mainly reliant on grammar-translation methods and rote memorization, methods which tend to create students who can comprehend a sentence but are unable to produce one under genuine communication pressure. The significant gains in post-test scores and the measurable gains in fluency, confidence and participation indicate that when students are given structured opportunities to use Arabic for real purposes – not just to show what they know about it– the language starts to work differently for them.

This is consistent with the broader literature on communicative language teaching. These findings reiterate Hymes' core point that competence is not simply grammatical but communicative in nature, which has long been the basis for CLT as a framework, and which has been more slow to penetrate the Arabic specific context. Similarly, the PjBL dimension coincides with the underlying objective of project-based learning described by Krajcik and Shin. According to them, information created through authentic, goal-oriented work is more durable and transferrable than knowledge obtained through decontextualised exercises. What this study adds to that existing literature is a clearer view of how these two frameworks intersect within the context of Arabic speaking instruction in particular, a pairing which has received relatively less empirical attention than their use in English or other widely taught languages.

But perhaps the more subtle finding is about personality. The difference in improvement patterns between extroverted and introverted students was not only a matter of one group doing better than the other. It is not unexpected that extroverted students were more likely to spontaneously join in the communicative activities, as interaction-rich circumstances are naturally favourable to individuals who are already predisposed to verbalise. But introverted students also showed consistent and meaningful gain, especially when the learning environment included controlled tasks, smaller group settings and what the research generally labels as low-anxiety environments. This is important because it questions a tacit assumption in communicative language teaching: that interaction-rich situations are, per se, excellent for all. But they are only so when they are also built to be mentally safe. Here the statistics show that it is not the communicative method per se that favours introverted learners but the implementation of it that is carefully scaffolded. The distinction has practical implications for the design and implementation of CLT-based instruction.

This finding is relevant to a line of research on introversion and language learning that has evolved greatly since the early work of Eysenck and, later, MacIntyre and Gardner's work on language anxiety. Traditionally, extroversion has been associated with better results for oral proficiency. But more recent work complicates this picture, claiming that the relationship between personality and language performance is significantly influenced by instructional context. The present investigation supports that more nuanced picture. Introversion is not predictive of bad results, it is predictive of a need for different settings.

In theory, the study supports what can be called a multidimensional model of language acquisition, a model that considers the cognitive, social and affective dimensions of learning simultaneously. Neither PjBL nor CLT alone would have generated the same outcomes, it is their combination that produces an environment where students build knowledge, use language meaningfully, and

do so within a social structure that provides sufficient support to make participation feel possible. This impacts on the way in which academics theorize communicative competence, not as an achievement merely of language, but as a product of the emotional and interpersonal settings that shape language practice. The findings present a particular challenge for teachers in practice, in order to do not teach in a uniform fashion. This is easier said than done, particularly in large classes and fixed curricula, but the evidence here suggests that even modest changes –varying group sizes, including planning time for oral tasks, offering structured output frameworks– can make a significant difference for learners who do not naturally prosper in open-ended communicative environments. Teachers don't have to overhaul their whole method, they just have to create flexibility when learner characteristics diverge.

The policy consequences are severe ones to consider. In many educational systems, the teaching of the Arabic language is still caught up in old frameworks which value formal precision more than communicative usefulness. If institutions are genuinely interested in producing graduates who can use Arabic in professional, social and intercultural contexts, then the structural conditions for communicative instruction –adequate time, appropriate assessment formats, teacher training in CLT and project-based methods– need to be in place. Findings like those reported here have provided an empirical basis for that claim.

This study has limitations and it is important to be upfront about them for honest interpretation of the results and for direction of future work. The primary limitation is the scope. The study was conducted in a single institutional context, over a relatively short implementation time and with a sample size that, although sufficient for the analyses performed, limits the extent to which the findings may be confidently generalised. The advantages reported may be a function of contextual factors particular to this setting –teacher attributes, student cohort, institutional culture– that would not generalise equally to other settings. The personality variable, while productive, was also dealt with here in somewhat broad terms. The extroversion-introversion distinction is a useful organising framework, but personality is far more complex than a binary, and future research would benefit from incorporating more granular measures –anxiety scales, willingness-to-communicate instruments or measures of self-efficacy– that could tease apart which specific psychological dimensions are actually doing the most work in shaping outcomes.

Longitudinal studies are also needed. While the increases achieved over a single cycle of study are promising, they do not tell us whether these gains are maintained, whether students are able to transfer communicative abilities outside of the classroom context, or whether the technique is effective across a full academic year or beyond. Finally, the present study merely concerned with

speaking skills. Reading, writing and listening competencies were not investigated and it is an open question whether a PjBL-CLT integration yields similar gains in all four skill areas or whether speaking –the most socially and interpersonally immediate skill– benefits disproportionately from such instruction.

CONCLUSION

Based on the research findings and data analysis, it can be concluded that the implementation of a communicative approach through the Project-Based Learning (PjBL) model is proven effective in enhancing the speaking skills (*speaking skills*) of ninth-grade students at MTsN 1 Sijunjung. Statistical test results demonstrate a significant increase in the post-test scores of the experimental class compared to the control class, which utilized conventional learning methods. This improvement encompasses several aspects of speaking proficiency, including fluency, students' courage in expressing ideas, and the accurate use of Arabic vocabulary and grammar. These results indicate that the PjBL-based communicative approach does not only emphasize linguistic mastery but also supports the creation of interactive, meaningful learning that motivates students to participate actively.

Furthermore, the results indicate that personality types influence the effectiveness of the PjBL approach in developing speaking skills. Students with extroverted personalities tend to show a more significant improvement, particularly in the aspects of fluency and speaking confidence. This can be attributed to the characteristics of extroverts -who are typically more active, self-assured, and comfortable with social interaction- meaning that learning activities such as role-plays, group discussions, and project simulations provide optimal opportunities for them to practice and express their oral Arabic abilities.

Meanwhile, students with introverted personalities also experienced significant improvements in their speaking skills, albeit in a more gradual and structured manner. The PjBL approach provides a safe space for introverted students through small-group work, directed guidance, and project-based activities that allow them to practice consistently. This strategy has proven effective in reducing speaking anxiety, increasing self-confidence, and facilitating the gradual development of vocabulary and language structure.

In conclusion, this research demonstrates that the PjBL-based communicative approach holds high potential for enhancing students' Arabic speaking skills while considering differences in personality characteristics. This learning model emphasizes not only linguistic aspects but also the social, emotional, and motivational dimensions of the students. Therefore, it serves as a viable alternative for more innovative, interactive, and effective Arabic language instruction at the junior high school level.

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