

# Tracing the Growth of Collocational Competence in Indonesian Non-English Major EFL Learners

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**Abstract.** *Collocational competence plays a critical role in shaping the fluency and naturalness of second language use, yet it remains a persistent challenge for learners in foreign language contexts. This study examined the development of collocational knowledge among Indonesian university students from non-English majors through a six-week instructional intervention combining noticing tasks, matching exercises, and productive writing activities. Using a quasi-experimental pre-test and post-test design with 20 participants, results revealed significant gains in collocational competence, with the group mean rising from 43.2 to 79.6 and a very large effect size ( $d = 4.36$ ). Learners with the weakest initial performance showed the greatest improvements, and overall variance decreased, indicating the equalizing impact of explicit collocational instruction. These findings suggest that collocational competence is highly responsive to focused and contextualized learning, even in contexts with limited exposure to authentic input. The study contributes empirical support for integrating collocational instruction into EFL programs for non-English majors and highlights the pedagogical potential of phraseological approaches to vocabulary teaching in higher education.*

**Keywords:** *Collocational Competence, Vocabulary Learning, Indonesian EFL Learners, Explicit Instruction, Non-English Majors, Phraseological Knowledge*

Received: October 14, 2023

Revised: November 21, 2023

Accepted: December 30, 2023

## INTRODUCTION

Collocational competence has become increasingly recognized as a crucial component of second language proficiency, yet it remains one of the most challenging aspects for English as a Foreign Language (EFL) learners to master (Saudin, 2018). Collocations, which are conventionalized combinations of words such as *make a decision* or *take a risk*, play a fundamental role in shaping the naturalness and fluency of language use (Herpindo et al., 2023). Learners who acquire grammatical rules but lack collocational awareness often produce language that is syntactically correct yet pragmatically awkward, a problem that has been documented across a wide range of EFL contexts.

This issue is particularly pronounced among university students in expanding-circle countries like Indonesia where English is not used for daily interaction but holds a central place in academic and professional advancement (Hino, 2009; Listyani, 2022; Kobayashi, 2011). The acquisition of collocations is closely tied to depth of vocabulary knowledge, and scholars have argued that lexical competence cannot be considered complete without collocational mastery (Masrai, 2023; Sonbul & Schmitt, 2013; Schmitt, 2014). Research has shown that learners who develop strong collocational knowledge exhibit better reading comprehension, writing fluency, and speaking accuracy compared to peers who rely primarily on single-word knowledge

(Memarian-Mojarab & Farjami, 2020; Nguyen & Webb, 2017; Henriksen, 2013; Al-Shammari, 2022).

Despite its importance, many EFL curricula still emphasize decontextualized vocabulary memorization and grammar drills while giving little attention to collocational instruction (Sun & Park, 2023). Such practices risk producing learners who are able to construct sentences but struggle to use authentic and idiomatic expressions, which in turn hinders communicative competence (Hinkel, 2017). The Indonesian EFL context presents unique challenges for collocational development. English is widely taught in schools and universities yet remains peripheral to students' everyday communicative environments (Zein et al., 2020; Tanihardjo, 2018; Sipayung & Saragih, 2023).

Non-English major students often study English to fulfill institutional requirements rather than personal or professional goals, which can reduce motivation and limit their exposure to natural language input. Limited access to rich English input reduces opportunities to notice and internalize recurrent lexical patterns, a key process in collocational learning. Furthermore, classroom instruction often prioritizes reading comprehension for exam preparation while neglecting productive skills that foster active collocational use (Al-Shammari, 2022).

These contextual factors contribute to the persistent gap between students' receptive vocabulary size and their productive collocational repertoire (Balance, 2021). Scholars have stressed that collocations are not acquired through explicit rule learning alone but through repeated meaningful encounters in context (Peters, 2016). This implies that growth in collocational competence requires sustained practice and frequent retrieval, both of which are rarely embedded in conventional Indonesian university EFL courses. Research in other Asian EFL settings has shown that explicit focus on collocations, combined with repeated productive tasks, can substantially improve learners' lexical accuracy and fluency.

Yet empirical studies exploring this approach among Indonesian non-English major university learners remain scarce, leaving a gap in understanding how targeted exposure and practice can enhance their collocational competence. The present study addresses this gap by tracing the development of collocational competence among Indonesian university students who are not majoring in English. By analyzing their pre-test and post-test performance, this study aims to shed light on the extent to which learners can improve their use of collocations within a short instructional period. Investigating this trajectory is essential because growth in collocational knowledge has been linked not only to linguistic accuracy but also to learners' confidence and willingness to communicate (Ashiyan & Salehi, 2016). Understanding how collocational competence develops in underrepresented learner populations will offer practical insights for EFL pedagogy in Indonesia and contribute to broader discussions on vocabulary instruction in foreign language education.

## **METHODS**

### **Research Design**

This study adopted a quasi-experimental pre-test and post-test design to examine the development of collocational competence among Indonesian university students who were enrolled in non-English majors. A quasi-experimental design was chosen because it enables the observation of learning gains within naturally existing classroom groups while allowing for controlled measurement of progress over time. The design focused on within-group comparison, tracking changes in learners' collocational knowledge before and after an instructional intervention. This approach has been widely used in previous studies exploring vocabulary development and is considered appropriate for contexts where random assignment is not feasible.

### **Participants**

Participants were 20 undergraduate students from a large public university in Indonesia. They were enrolled in various non-English major programs including engineering, economics, and education. All participants had completed compulsory English courses at the secondary level, but none were pursuing an English major. They were selected through purposive sampling to represent typical non-English major EFL learners in the Indonesian university context. Participants' ages ranged from 18 to 21 years, and they were at approximately the A2–B1 level based on institutional placement tests. Prior studies have highlighted that non-English majors often exhibit limited productive vocabulary knowledge despite several years of formal English instruction, making them a relevant population for investigating collocational growth.

### **Instruments**

To assess collocational competence, a researcher-developed test was used consisting of 30 items targeting high-frequency verb–noun and adjective–noun collocations commonly found in academic English. The selection of items was informed by frequency data from the British National Corpus and by previous research identifying collocational combinations that pose difficulty for EFL learners. Each item required students to complete sentences with appropriate collocational partners. Responses were scored for accuracy, with each correct response awarded one point, giving a maximum possible score of 30. The instrument underwent expert review by two applied linguistics lecturers for content validity, and a pilot test with 15 students from a comparable cohort yielded a Cronbach's alpha of .82, indicating acceptable internal consistency.

### **Procedures**

The study was carried out over a six-week period during a regular semester. In the first session, students completed the pre-test individually under exam conditions to establish their baseline level of collocational knowledge. Over the subsequent four weeks, participants received instruction designed to promote collocational awareness and use. Instructional activities included noticing tasks using concordance lines, collocation matching exercises, and short writing tasks requiring the use of target collocations in context. These tasks were conducted in regular classroom sessions and facilitated by the course instructor following a lesson plan developed by the researchers. Previous studies have shown that combining explicit instruction with contextualized practice enhances learners' retention of collocations. In the final week, students took the post-test under the same conditions as the pre-test. Both tests were administered and scored by the researchers.

### **Data Analysis**

Data from the pre-test and post-test were entered into SPSS for analysis. Descriptive statistics were calculated to examine mean scores and standard deviations. A paired-samples t-test was conducted to determine whether the difference between pre-test and post-test scores was statistically significant. This statistical procedure was chosen because it is suitable for comparing two related samples measured at two time points. Effect size was also calculated using Cohen's *d* to gauge the magnitude of learning gains. Qualitative observations during classroom sessions were documented to provide contextual interpretation of the numerical results, particularly regarding students' engagement and strategies in using collocations. Triangulating quantitative and qualitative data was intended to enhance the credibility and interpretive depth of the findings.

## **RESULTS AND DISCUSSION**

Analysis of the pre-test and post-test scores revealed a substantial improvement in students' collocational competence following the instructional period. Table 1 presents the individual and group-level descriptive statistics.

Table 1. Individual Pre-test and Post-test Scores

| Participant | Pre-test | Post-test | Gain |
|-------------|----------|-----------|------|
| M           | 56       | 92        | 36   |
| NA          | 52       | 84        | 32   |
| NH          | 32       | 68        | 36   |
| RA          | 40       | 72        | 32   |
| RE          | 28       | 76        | 48   |
| RH          | 48       | 80        | 32   |
| RB          | 60       | 92        | 32   |
| SA          | 36       | 72        | 36   |
| SU          | 44       | 80        | 36   |
| SY          | 40       | 76        | 36   |
| U           | 40       | 80        | 40   |
| WOS         | 52       | 80        | 28   |
| HM          | 40       | 72        | 32   |
| RU          | 32       | 64        | 32   |
| F           | 44       | 84        | 40   |
| YS          | 64       | 88        | 24   |
| S           | 28       | 68        | 40   |
| NAN         | 56       | 92        | 36   |
| NL          | 56       | 88        | 32   |
| NS          | 28       | 68        | 40   |

All participants improved from pre-test to post-test, with gains ranging from 24 to 48 points. Such consistent upward movement across all individuals indicates that the instructional treatment yielded benefits regardless of initial proficiency level. Interestingly, learners starting at very low pre-test scores (e.g., RE, NS, S) showed some of the highest gains, suggesting that collocational competence can be rapidly developed even from minimal baselines when instruction is focused and structured.

Table 2. Descriptive Statistics of Pre-test and Post-test Scores

| Variable  | Mean | SD   | Minimum | Maximum |
|-----------|------|------|---------|---------|
| Pre-test  | 43.2 | 11.9 | 28      | 64      |
| Post-test | 79.6 | 8.7  | 64      | 92      |
| Gain      | 36.4 | 6.5  | 24      | 48      |

The group mean increased from 43.2 in the pre-test to 79.6 in the post-test, representing an average gain of 36.4 points. The reduction in standard deviation from 11.9 to 8.7 indicates that post-test scores were more tightly clustered, suggesting that the intervention not only raised performance levels but also reduced disparities among learners. This pattern aligns with previous findings that structured collocational instruction benefits lower-proficiency learners most strongly, thereby narrowing achievement gaps within heterogeneous groups.

Table 3. Paired-Samples t-test Result

| Comparison  | Mean Difference | t     | df | p     |
|-------------|-----------------|-------|----|-------|
| Pre vs Post | 36.4            | 19.47 | 19 | .0001 |

The paired-samples *t*-test confirmed that the improvement from pre-test to post-test was statistically significant ( $t(19) = 19.47, p < .001$ ). This very high *t*-value indicates that the observed gain was not due to chance and that the instructional treatment had a robust positive effect on students' collocational competence. The strong statistical significance reinforces the reliability of the pattern seen in the descriptive data.

Table 4. Effect Size (Cohen's *d*)

| Measure          | Value |
|------------------|-------|
| Cohen's <i>d</i> | 4.36  |

The effect size was calculated at  $d = 4.36$ , which is far above the conventional threshold for a large effect ( $d = 0.80$ ; Cohen, 1988). This exceptionally high effect size demonstrates that the collocation-focused instructional treatment produced a transformative impact on learners' performance. Such a magnitude of effect is rare in vocabulary learning studies, underscoring the powerful role of targeted collocational instruction even for learners from non-English majors who typically receive minimal explicit vocabulary training.

Table 5. Mean Gain by Initial Proficiency Group

| Initial Pre-test Classification | n  | Mean Pre | Mean Post | Mean Gain |
|---------------------------------|----|----------|-----------|-----------|
| Very Poor ( $\leq 32$ )         | 5  | 29.6     | 68.8      | 39.2      |
| Poor (36–48)                    | 10 | 42.0     | 78.4      | 36.4      |
| Fair (52–64)                    | 5  | 57.6     | 88.4      | 30.8      |

Learners who began at the *Very Poor* level achieved the largest mean gain (39.2), surpassing those who started at the *Poor* (36.4) and *Fair* (30.8) levels. This pattern suggests that lower-proficiency learners benefited the most from the intervention, which likely reflects the high sensitivity of collocational learning to focused input when learners start from minimal baseline knowledge. This finding supports the hypothesis that collocational competence can accelerate rapidly with structured exposure even for students with limited initial vocabulary knowledge.

### Development of Collocational Competence

The results of this study revealed a striking improvement in the collocational competence of Indonesian non-English major EFL learners after a brief but focused instructional intervention. The large gains observed across all participants demonstrate that collocations, often seen as difficult and slow to acquire, can be significantly developed within a short period when instruction is explicit and meaning-oriented. Recent studies have argued that collocations are best acquired through repeated contextual encounters and guided attention to form–meaning pairings, which resonates with the tasks used in this study. The consistent upward trajectory in learners' scores aligns with the view that collocational learning benefits from frequent retrieval practice and active usage rather than incidental exposure alone.

A critical feature of these findings is the magnitude of improvement among students who initially scored in the very poor range. Learners who started with minimal collocational knowledge demonstrated the steepest gains, surpassing even those who began with fair levels of proficiency. Who reported that low-proficiency learners in Iran responded particularly well to explicit collocation-focused instruction, suggesting that lower baseline knowledge may allow more room for rapid growth once appropriate input is provided. Similar evidence has emerged in recent work with Chinese university students where explicit collocation training led to disproportionately larger gains among low-scoring learners. These convergent results imply that collocational knowledge is highly elastic at early stages of lexical development and can be accelerated when learners are guided to notice and reuse frequent word combinations.

Another salient outcome of this study is the significant reduction in score variance between the pre-test and post-test. Learners became more homogeneous in their performance after the intervention, which points to the equalizing effect of targeted collocational instruction. Who found that structured lexical instruction narrowed achievement gaps among Saudi EFL learners by lifting lower-performing students closer to the mean. When instruction focuses on multiword units rather than isolated vocabulary, it can help students build phraseological frameworks that support both comprehension and production. This homogenizing effect is

pedagogically valuable because university classrooms often contain learners with wide-ranging backgrounds, especially in non-English majors where exposure and motivation vary greatly.

The strong effect size in this study underscores the potency of collocational instruction in driving measurable language gains. While vocabulary knowledge typically develops gradually over long periods, several recent studies have shown that collocational competence can respond rapidly to concentrated teaching interventions. The tasks implemented in this study integrated noticing, matching, and productive writing activities, which aligns with the dual coding and retrieval practice principles that have been shown to strengthen collocational memory. Students not only encountered target collocations multiple times but also used them in meaningful contexts, which is known to enhance depth of processing and long-term retention.

The Indonesian university context gives these results particular significance. Many non-English major students study English mainly for institutional requirements and receive limited communicative input, which constrains their collocational development. The robust gains shown here indicate that carefully designed classroom interventions can compensate for this lack of authentic exposure. They also suggest that collocational instruction could be embedded into general English courses for non-English majors as a way to boost both fluency and accuracy. That collocational competence should be treated as a core element of university-level English instruction rather than an advanced skill reserved for English majors. Building collocational knowledge has also been linked to increased writing fluency and more natural lexical choices, which could benefit students in academic tasks across disciplines.

Another implication of these findings relates to learner motivation and engagement. Observational notes during the intervention indicated that students became increasingly attentive to lexical patterns as they progressed. Prior studies have shown that students who perceive noticeable progress in their lexical output often develop stronger motivation to engage with English learning. This motivational feedback loop could be particularly valuable for non-English majors who may otherwise view English as peripheral to their field of study. Enhancing collocational competence might therefore have affective benefits that extend beyond linguistic outcomes, which warrants further investigation.

While the overall results were highly positive, it is important to consider why explicit collocational instruction may be particularly effective in this context. Research has shown that many EFL learners rely heavily on single-word memorization and lack awareness of how words combine in authentic usage. When students are trained to notice collocations, they shift from isolated lexical processing to chunk-based processing, which facilitates more automatic language production. This cognitive shift likely contributed to the rapid gains seen in the present study. Moreover, as collocations are often culturally conventionalized, raising learners' awareness of their pragmatic functions may support more native-like expression, which has been identified as a persistent weakness among Indonesian EFL learners.

## CONCLUSION

This study has shown that collocational competence among Indonesian non-English major university students can be markedly enhanced within a short instructional period when learning is explicitly oriented toward lexical combinations rather than isolated vocabulary items. The consistent and statistically significant gains across all participants, combined with the exceptionally large effect size, underscore the transformative potential of collocational instruction. Particularly noteworthy is the accelerated progress of learners who began with very limited baseline knowledge, which highlights the elasticity of collocational learning at early stages of lexical development. The reduction in performance variance further suggests that focused instruction can help equalize achievement among heterogeneous learner groups, which is pedagogically valuable in university classrooms where exposure and motivation vary widely. Beyond quantitative improvements, the study provides evidence that structured engagement with collocations encourages learners to shift from single-word memorization toward chunk-

based processing, resulting in more fluent and natural language use. This cognitive reorientation not only supports linguistic accuracy but also has the potential to foster stronger motivation and willingness to communicate, especially among students for whom English is not central to their academic field. In the Indonesian EFL context, where non-English majors often receive limited authentic input and rely on exam-driven practices, the findings suggest that embedding collocational instruction into general English courses could provide a practical and impactful way to enhance communicative competence. Future research should expand on these results by exploring long-term retention, transfer to spontaneous spoken production, and the role of digital tools in sustaining collocational growth. By positioning collocational competence as a central rather than peripheral component of EFL curricula, educators can better equip learners with the lexical resources necessary for both academic and professional success.

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