

## TRANSLANGUAGING IN VOCABULARY LEARNING: ITS IMPACT ON EFL LEARNERS' VOCABULARY KNOWLEDGE AND RETENTION SKILLS

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### Abstract

*This quasi-experimental mixed-methods study investigates the effects of translanguaging pedagogy on vocabulary knowledge, short-term retention, and learner perceptions among tenth-grade Turkish EFL students. Sixty participants were randomly assigned to either a treatment group that received bilingual instruction (Turkish-English) or a control group that received English-only instruction. Quantitative findings from pre- and post-tests revealed significantly higher vocabulary gains in the treatment group (Cohen's  $d = 1.31$ ), confirming the pedagogical advantage of integrating students' L1. Qualitative data from focus group interviews highlighted students' positive attitudes toward translanguaging, emphasising reduced anxiety, enhanced comprehension, and increased motivation. The study concludes that translanguaging not only supports lexical development but also promotes socio-affective engagement in English as a Foreign Language (EFL) classrooms. These findings underscore the importance of leveraging students' full linguistic repertoires to create inclusive, cognitively supportive, and empowering learning environments. The research contributes to the growing body of evidence advocating for L1-inclusive instructional strategies in monolingual English as a foreign language (EFL) contexts, such as Türkiye.*

**Keywords:** Translanguaging, Vocabulary acquisition, EFL learners, L1 integration, Mixed-methods research.

**Kelime Öğrenmede Diller Arası Geçiş: İngilizce Öğrencilerinin Kelime Bilgisi ve Hatırlama Becerileri Üzerindeki Etkisi**

### Öz

*Bu yarı deneysel karma yöntemli çalışma, onuncu sınıf Türk İngilizce öğrencileri arasında diller arası geçiş (translanguaging) pedagojisinin kelime bilgisi, hatırlama becerisi ve öğrenci algıları üzerindeki etkilerini incelemektedir. Altmış katılımcı rastgele şekilde iki gruba ayrılmıştır: biri Türkçe-İngilizce iki dilli öğretim alan deney grubudur, diğeri ise yalnızca İngilizce ile eğitim alan kontrol grubudur. Ön test ve son test bulguları, deney grubunun anlamlı düzeyde daha yüksek kelime kazanımları gösterdiğini ortaya koymuştur (Cohen's  $d = 1.31$ ) ve öğrencilerin birinci dillerinin entegrasyonunun pedagojik faydasını doğrulamaktadır. Odak grup görüşmelerinden elde edilen nitel veriler, öğrencilerin diller arası geçiş (translanguaging) yaklaşımına yönelik olumlu tutumlarını ortaya koymuş; kaygının azaldığını, anlama düzeyinin arttığını ve motivasyonun yükseldiğini göstermiştir. Çalışma, diller arası geçiş (translanguaging) uygulamalarının yalnızca sözcük gelişimini değil, aynı zamanda sosyo-duygusal katılım da desteklediğini ortaya koymaktadır. Bu bulgular, tek dilli yabancı dil olarak İngilizce bağışlarında öğrencilerin tüm dilsel birikimlerini kullanmaya olanak tanıyan kapsayıcı ve etkili öğretim stratejilerinin önemini vurgulamaktadır.*

**Anahtar Kelimeler:** Diller arası geçiş, Kelime edinimi, İngilizceyi yabancı dil olarak öğrenenler, Birinci dil entegrasyonu, Karma yöntem araştırması.

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## 1. Introduction

Vocabulary acquisition lies at the heart of second and foreign language development, forming the foundation for productive and receptive skills (Chiew & Ismail, 2021; González-Fernández & Schmitt, 2017; Tahir et al., 2021; Yang et al., 2021; Zeng et al., 2022). For EFL learners, particularly at the high school level in contexts such as Türkiye, acquiring and retaining new vocabulary items remains a persistent challenge (Özer & Akay, 2022; Tunç & Kozikoğlu, 2022). Despite years of formal instruction, many students struggle to recall and use basic lexical items effectively, a problem exacerbated by traditional monolingual teaching methods that prioritise English-only input while systematically neglecting learners' home languages (Tai, 2024; Wang et al., 2025). In recent years, however, translanguaging pedagogy has emerged as a promising alternative to conventional approaches (Bolkvadze, 2023; Cenoz & Gorter, 2021, 2022; Iqbal et al., 2024; Lee, 2022). While traditional L1 use often views the first and second languages as separate, autonomous systems, translanguaging is defined as the strategic deployment of a speaker's full linguistic repertoire without adherence to socially constructed language boundaries (García & Wei, 2014). In an EFL context, translanguaging strategies involve more than mere translation; they encompass cognitive and pedagogical tools—such as bilingual scaffolding, cross-linguistic comparisons, and collaborative dialogue—that enable learners to mediate complex meanings and internalize new knowledge through their existing linguistic resources (Lewis et al., 2012; Wei, 2018). This study adopts the term "translanguaging" rather than "L1 use" to emphasize this dynamic, holistic process where Turkish and English are utilized interdependently to construct a deeper understanding of target vocabulary, thereby transforming the classroom into a multilingual space where students' primary languages are validated as epistemic resources (Cenoz & Gorter, 2021; Li, 2011). Rooted in sociocultural and critical applied linguistics frameworks, translanguaging encourages the strategic and dynamic use of learners' full linguistic repertoires—including their first language—as cognitive and cultural resources (Van Viegen & Lau, 2022). Research suggests that translanguaging not only facilitates meaning-making but also strengthens memory retention, promotes learner agency, and reduces anxiety by affirming students' linguistic identities (Huang, 2024; Rajendram et al., 2022; Zhao, 2023). While the benefits of translanguaging have been documented in bilingual and ESL contexts, its pedagogical application within EFL classrooms, especially at the high school level, remains underexplored (Irgin, 2025; Shaikh, 2025). In Türkiye, secondary English instruction is often governed by English-only policies, even though most students rely on Turkish as their primary language of thought and expression (Yahşi, 2019). This dissonance can create cognitive overload, limit learner engagement, and reduce long-term retention of vocabulary (Yasar-Yuzlu & Dikilitas, 2022). Addressing this gap, the present quasi-experimental mixed-methods study investigates the impact of translanguaging strategies—such as Turkish explanations, bilingual examples, and cross-linguistic discussions—on vocabulary learning and short-term retention among tenth-grade English as a Foreign Language (EFL) students. Sixty participants were randomly assigned to a treatment group that received translanguaging-based instruction and a control group that received English-only vocabulary instruction. In addition to pre- and post-testing, semi-structured focus group interviews were conducted with the treatment group to explore learner perceptions and experiences. As language teachers and policymakers in Türkiye seek more inclusive, student-centred, and practical strategies for foreign language instruction (Üzüm & Özbek, 2024), translanguaging offers a viable pedagogical tool to enhance lexical development while fostering socio-affective engagement (Veerman et al., 2025). The present study is further significant for teachers working with linguistically diverse populations, offering practical insights into how translanguaging can be systematically implemented to support vocabulary instruction. What distinguishes this study from existing literature is its dual emphasis on both cognitive vocabulary retention and the socio-affective dimensions of learning within a strictly monolingual-policy EFL environment. While previous research has often focused on ESL settings or general language

proficiency, this study provides a specific methodological bridge by combining quantitative gains (effect size) with qualitative insights into learner anxiety and motivation. Contextually, it addresses the unique linguistic tension in Turkish high schools, offering a scalable model for how L1 integration can coexist with national curriculum standards to empower learners. By providing empirical evidence of the "how" and "why" behind translanguaging's effectiveness, this research moves beyond theoretical advocacy toward practical, classroom-based implementation. In this context, the study was guided by the following research questions:

- What is the effect of translanguaging strategies on EFL learners' vocabulary knowledge?
- How do translanguaging strategies influence students' ability to retain newly learned vocabulary?
- How do students perceive the use of translanguaging strategies during vocabulary instruction?

### 1.1. Translanguaging Pedagogy in EFL Classrooms

Translanguaging pedagogy has emerged as a transformative approach in multilingual education, challenging long-standing monolingual ideologies and redefining how language learning occurs in increasingly diverse classrooms (Barros et al., 2021; Carroll, 2022; Cenoz & Gorter, 2021; Hadjioannou, 2023; Nie et al., 2024). Coined by Williams (1996) in the context of Welsh-English bilingual education and later expanded by García (2011), translanguaging refers not merely to code-switching or translation, but to the strategic and purposeful use of learners' full linguistic repertoires to construct meaning, communicate, and learn (Wei & García, 2017). Within this framework, the boundaries between languages are viewed as fluid and socially constructed rather than fixed, hierarchical, or autonomous (Kramsch, 2014). At its core, translanguaging pedagogy draws from sociocultural theory (Vygotsky, 1978) and critical applied linguistics (Pennycook, 2004), both of which emphasise the role of language as a tool for mediation, identity formation, and social participation. It positions students not as deficient second-language speakers, but as capable multilinguals whose lived experiences and home languages are epistemic resources for learning (Creese & Blackledge, 2010; García & Kleyn, 2016). This paradigm shift is particularly relevant in contexts of migration, displacement, and educational inequality, where students' linguistic identities are often ignored or suppressed within dominant language policies (Charalambous et al., 2020). Empirical studies across diverse settings have demonstrated that translanguaging enhances students' comprehension, memory retention, classroom engagement, and sense of belonging (Galante, 2021; García-Mateus & Palmer, 2017). In particular, translanguaging has been shown to enhance vocabulary acquisition by enabling learners to draw on prior knowledge, form semantic associations, and reduce cognitive load (Cenoz & Gorter, 2014; Wang et al., 2025). Additionally, the use of L1 during vocabulary learning supports lexical retention by reinforcing conceptual understanding and facilitating deeper processing, especially among lower-proficiency learners (Back et al., 2020; Cui & Pacheco, 2023). Despite its growing prominence in bilingual and ESL settings, the implementation of translanguaging pedagogy in EFL classrooms remains comparatively limited (Ghajarieh et al., 2025). In many national education systems, including Türkiye's, English language instruction is still governed by target-language-only ideologies, which discourage or even prohibit the use of learners' home languages during classroom instruction (Altay & Yüksel, 2025; Yasar-Yuzlu & Dikilitaş, 2022). As a result, EFL learners often struggle with vocabulary overload, lack of clarity, and low retention rates due to the disconnect between classroom language and their primary cognitive-linguistic resources (Wirag et al., 2022). However, recent research has begun to document the positive outcomes of introducing translanguaging practices into English as a Foreign Language (EFL) contexts (Huang & Chalmers, 2023). For instance, Sayer (2013) found that allowing Mexican EFL learners to use Spanish during vocabulary instruction led to higher engagement and retention. Similarly,

Galante (2021) demonstrated that translanguaging not only improved learners' lexical performance but also contributed to their self-confidence and classroom participation. In the Turkish context, studies by Yasar-Yuzlu and Dikilitaş (2022) and Eren and Çavuşoğlu (2023) have argued for the pedagogical legitimacy of L1 use, particularly in vocabulary instruction, as a means to bridge the gap between learner needs and curriculum expectations. Moreover, translanguaging pedagogy holds particular promise for linguistically marginalised learners (Ateek, 2024; Yilmaz, 2024). In summary, the literature suggests that translanguaging pedagogy can significantly enhance vocabulary learning in EFL classrooms by activating prior knowledge, supporting memory retention, lowering anxiety, and validating students' linguistic identities (Zhou et al., 2024). Besides, as Türkiye continues to navigate the challenges of multilingual education (Aydin & Kaya, 2019), particularly in secondary schools serving both native Turkish speakers and Arabic-speaking refugees, adopting translanguaging strategies may provide a culturally responsive and academically sound approach to vocabulary instruction (Maadad & Yilmaz, 2021).

## **1.2. Theoretical Framework**

The present study is grounded in an integrated theoretical framework. It draws from Sociocultural Theory, Critical Applied Linguistics, and the concept of Translanguaging Spaces, as seen in Figure 1. These complementary perspectives provide the conceptual foundation for understanding how and why translanguaging pedagogy can facilitate vocabulary learning and short-term retention among Turkish English as a Foreign Language (EFL) learners.

### **1.2.1. Sociocultural Theory (Vygotsky, 1978)**

From a sociocultural perspective, cognition develops via socially mediated activity, and language serves as the primary mediational means (Lantolf, 2006). From this perspective, knowledge is constructed through interaction with more knowledgeable others within a culturally and linguistically situated environment (Pathan et al., 2018). Translanguaging aligns with this view by encouraging learners to utilise their entire linguistic repertoires as mediational tools, enabling them to scaffold new vocabulary and internalise complex concepts through the interplay of familiar and target languages (Li et al., 2025). This is particularly important for students whose first language (L1) differs from the language of instruction, as it enables access to content that might otherwise remain linguistically inaccessible (Tai, 2024).

### **1.2.2. Critical Applied Linguistics (Pennycook, 2004)**

While sociocultural theory examines how learning occurs, critical applied linguistics scrutinises the power structures inherent in language education (Kubota & Miller, 2017). It critiques dominant ideologies that uphold monolingual norms (Ellis, 2007; Lewis & Moje, 2003), especially in EFL settings where English-only policies often marginalise learners from non-dominant linguistic backgrounds (Manan et al., 2020). By legitimising the use of Turkish and Arabic in the classroom, translanguaging challenges the hegemony of English and affirms the linguistic identities of both majority and minority students (Ataş, 2023). It reconfigures the classroom as a space where linguistic equity is not only encouraged but also embedded in pedagogical practice (Yilmaz, 2021).

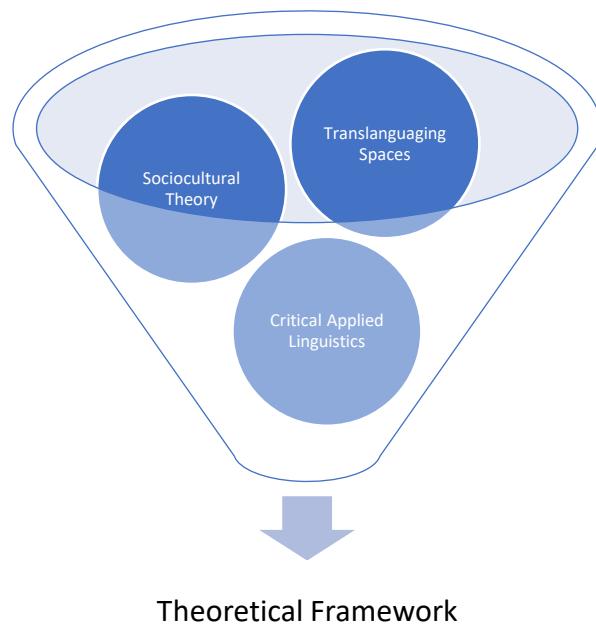
### **1.2.3. Translanguaging Spaces (Wei, 2011)**

Wei's (2011) concept of translanguaging spaces describes classrooms not only as physical sites of instruction but also as dynamic social spaces where learners can negotiate meanings, identities, and power relations through multiple languages (Wei, 2018). These spaces offer students opportunities to express themselves authentically, engage in more profound meaning-making, and develop agency in their learning processes (Kaufhold, 2018). In the current study, the translanguaging classroom serves as

such a space, enabling Turkish students to engage in bilingual vocabulary tasks, reflect on word meaning in their terms, and strengthen their long-term lexical retention through cross-linguistic reinforcement. By integrating these theoretical perspectives, the present study conceptualises translanguaging pedagogy as a vehicle for both linguistic development and sociocultural transformation. It recognises the centrality of learners' multilingual identities in shaping their academic trajectories and advocates pedagogical practices that validate rather than suppress these identities. The framework informs the design of the vocabulary instruction intervention, the structure of the assessment tasks, and the interpretation of learner experiences through qualitative inquiry. Ultimately, this theoretical lens underpins the study's aim to evaluate how translanguaging can serve as both an instructional strategy and a platform for multilingual empowerment in English as a Foreign Language (EFL) education.

**Figure 1**

*Theoretical Framework*



## 2. Methodology

### 2.1. Research Design

This study employed a quasi-experimental mixed-methods design, combining quantitative and qualitative approaches to investigate the effects of translanguaging strategies on vocabulary acquisition and short-term retention among Turkish high school students learning English as a Foreign Language (EFL). Students were assigned to either a treatment group, which received instruction incorporating Turkish alongside English, or a control group, which followed a traditional English-only vocabulary instruction model. The design enabled a robust comparison of learning outcomes and provided insight into learners' perspectives. The choice of "translanguaging" as the guiding framework, rather than "L1 use," is theoretically grounded in the view that Turkish and English function as a single, integrated linguistic system in learners' minds (Wei, 2018). In this study, translanguaging strategies were not used as mere translation equivalents but as dynamic tools for meaning-making, in which students were encouraged to draw on their full linguistic repertoires to clarify the conceptual boundaries of target vocabulary. This aligns with pedagogical translanguaging, which refers to instructional strategies that support the development of the target language by strategically using all languages in the learner's repertoire (Cenoz & Gorter, 2021).

## 2.2. Sample Group

The study involved 60 tenth-grade students from a public high school in southern Türkiye. The study employed a quasi-experimental design because participants could not be randomly assigned at the individual level due to the school's administrative structure and the requirement to maintain existing classroom cohorts. Instead, randomization was conducted at the class level; one intact class was randomly assigned as the treatment group ( $n = 30$ ) and the other as the control group ( $n = 30$ ). All students were Turkish-speaking and had English proficiency at the A2–B1 level, as determined by teacher evaluations and previous academic records. Participation was voluntary, and all ethical considerations—such as informed consent and data confidentiality—were strictly upheld. The researcher conducted the intervention in a public high school classroom. While the researcher acted as the instructor, potential researcher/teacher bias was mitigated through several measures to ensure internal validity. First, instructional fidelity was maintained using a standardised lesson plan and identical target vocabulary lists for both groups. Second, the researcher followed a strictly scripted instructional protocol to ensure that differences in outcomes were attributable to translanguaging strategies rather than to personal instructional variations. Furthermore, the use of bilingual scaffolding in the treatment group was balanced by parallel monolingual drills in the control group to maintain a consistent instructional pace across both cohorts. By standardising the materials and assessment tools, the study sought to minimize the teacher effect and isolate the pedagogical impact of translanguaging. All sessions were carried out during regular English course periods. The focus group interviews took place in a quiet space within the school, and each session lasted approximately 25–30 minutes. Instructional fidelity was maintained through the use of a standardised lesson plan across all sessions.

## 2.3. Instructional Procedure

The instructional process, as outlined in Table 1, spanned four weeks. It comprised pre-testing, three weeks of vocabulary instruction, and post-testing. Additionally, semi-structured focus group interviews were conducted with students in the treatment group during the final week of the study.

**Table 1**

*Instructional Procedure*

Week	Control Group	Treatment Group
Week 1	Vocabulary pre-test	Vocabulary pre-test
Week 2	15 words taught via English-only definitions	15 words introduced through cross-linguistic comparisons and Turkish-English conceptual mapping
Week 3	15 words taught through monolingual sentence use	15 words contextualised using bilingual scaffolding
Week 4	15 words reviewed with traditional flashcards	15 words integrated into translanguaging spaces via bilingual storytelling and collaborative cross-linguistic dialogue
Week 5	Vocabulary post-test	Vocabulary post-test
Week 5	—	Focus group interviews with 12 Turkish students

## 2.4. Instructional Materials and Assessment Tools

The instructional intervention was structured around a carefully selected list of 45 target vocabulary items, drawn from the Oxford 3000-word list. The items were selected by the researcher in

collaboration with the classroom teacher to ensure alignment with the national English curriculum and the specific learning outcomes of the tenth-grade syllabus. The words were cross-referenced with the students' current coursebooks to ensure they were pedagogically relevant yet not previously mastered, focusing on items appropriate for A2–B1 level learners. These words were distributed evenly across three instructional weeks and chosen for their relevance to A2–B1 level learners. In the treatment group, bilingual instructional materials were developed to support translanguaging pedagogy. These included Turkish-English definitions, dual-language vocabulary cards, glossaries, sentence examples, and scaffolded discussion prompts. The control group received parallel instruction using only monolingual English materials, in alignment with national EFL textbooks and curriculum standards. To assess learning outcomes, a 45-item multiple-choice vocabulary test was administered both before and after the intervention. The test items measured receptive vocabulary knowledge through meaning recognition, contextual understanding, and lexical accuracy. Two EFL experts reviewed the test to ensure its validity and age appropriateness. Additionally, semi-structured focus group interviews were conducted with 12 students from the treatment group after the post-test. The 12 participants for the interviews were selected using purposive sampling to represent a range of performance levels (high, average, and low) based on their post-test scores. This size was chosen to ensure data saturation while maintaining a manageable group dynamic for in-depth discussion, in line with the principle of representing the diverse linguistic experiences within the treatment group. The interview protocol explored students' emotional comfort, learning preferences, and perceived effectiveness of the translanguaging strategies used during the intervention.

## **2.5. Data Analysis**

To assess the effects of translanguaging strategies on vocabulary learning and short-term retention, we adopted a mixed-methods analytic approach. Quantitatively, independent-samples t tests compared pre- and post-test scores for the treatment and control groups, and Cohen's d indexed the intervention's effect size. Qualitatively, focus-group data were subjected to inductive thematic analysis to identify patterns in learners' emotional responses, cognitive engagement, and motivational appraisals of the translanguaging instruction.

## **2.6. Research Ethics**

All ethical procedures for this study were carried out in full compliance with institutional research standards. Ethical approval was formally obtained from the Mersin University Ethics Committee of the Institute of Educational Sciences (Decision ID 96, Meeting Number 4, Decision Date 05.05.2025). Before data collection, informed consent was secured from all participants, and parental consent forms were collected for students. Participants were informed of the study's purpose, the voluntary nature of participation, and their right to withdraw at any time without penalty. Confidentiality was ensured by anonymising all personal information and restricting data access solely to the researcher. The study adhered to the principles of respect, beneficence, and justice throughout all stages of implementation.

## **3. Findings**

### **3.1. Instrument Validation through Pilot Testing**

Before the main implementation, a pilot study was conducted with a group of 10 tenth-grade EFL students (not included in the final sample) to validate the vocabulary assessment tool. The pilot aimed to evaluate the clarity, appropriateness, and internal consistency of the items. Based on pilot data, the vocabulary test yielded a Cronbach's alpha of .81, indicating high internal reliability. Minor revisions were made to the wording of items to improve age appropriateness and cognitive alignment. The final version of the test was then administered in both the pre- and post-test phases of the main study.

### 3.2. Pre-Test Results: Baseline Vocabulary Knowledge (Week 1)

To establish baseline equivalence between the treatment and control groups prior to the intervention, a vocabulary pre-test was administered during the first week of the study. The 45-item multiple-choice test assessed students' receptive vocabulary across three dimensions: meaning recognition, contextual understanding, and word-form accuracy. An independent-samples t-test was conducted to compare pre-test scores between the two groups. Prior to the analysis, the assumptions for the t-test were checked to ensure statistical validity. Normality was assessed through the Shapiro-Wilk test and visual inspection of Q-Q plots, which indicated that the scores for both the treatment and control groups followed a normal distribution ( $p > .05$ ). Additionally, Levene's test for equality of variances confirmed that the assumption of homogeneity of variance was met ( $F = 0.04$ ,  $p = .847$ ). Results revealed no statistically significant difference between the treatment group ( $M = 21.47$ ,  $SD = 4.02$ ) and the control group ( $M = 20.93$ ,  $SD = 4.11$ ),  $t(58) = 0.51$ ,  $p = .612$ , as seen in Table 2. This suggests that both groups had comparable vocabulary proficiency levels before the implementation of translanguaging strategies.

**Table 2**

*Vocabulary Pre-Test Scores*

Group	N	Mean (M)	Standard Deviation (SD)	t (df = 58)	p-value
Treatment Group	30	21.47	4.02	0.51	.612
Control Group	30	20.93	4.11		

### 3.3. Instructional Phase – Comparative Observations (Week 2–4)

Although no formal quantitative data were collected during the instructional weeks (Weeks 2–4), qualitative observations and teacher field notes provided valuable insights into students' engagement, comprehension, and classroom behaviour. Learners in the treatment group, who received bilingual (Turkish-English) vocabulary instruction, were consistently more active and responsive. The pedagogical approach moved beyond simple L1 translation; instead, it used translanguaging as a cognitive tool, encouraging students to fluidly navigate between their linguistic repertoires to clarify abstract concepts. For example, during a storytelling task in Week 3, several students spontaneously used the target word "hesitate" in both Turkish ("tereddüt") and English, building bilingual sentences such as "*He did not hesitate—tereddiit etmedi—when he saw the accident.*" Classroom data and teacher field notes revealed that this practice allowed students to use Turkish not as a crutch, but as a bridge to develop deeper English lexical nodes.

In Week 2, rather than merely providing Turkish equivalents, the instructor facilitated cross-linguistic discussions in which students compared the semantic fields of English words with their Turkish synonyms. For instance, when learning 'reliable,' students discussed the Turkish word 'güvenilir' and explored how both languages categorize trust, thereby creating a 'translanguaging space' (Wei, 2011) that supports conceptual anchoring. This is evidenced by qualitative classroom data where a student noted: "Hocam, bu 'reliable' kelimesi galiba güvenilir demek, çünkü Türkçede 'rely' gibi geliyor bana," illustrating an active metalinguistic comparison rather than passive translation receipt.

In contrast, students in the control group, who were exposed only to English definitions and examples, frequently requested clarification in Turkish and exhibited visible signs of cognitive overload, especially when dealing with abstract or polysemous terms, such as "determine" or "issue." Teacher notes from Week 3 describe one student asking, "*Hocam bu 'issue' bir problem mi yoksa konu mu? İngilizcede ikisi de oluyor sanki?*", highlighting the confusion caused by monolingual explanations.

Whereas the control group followed structured textbook drills, the treatment group benefited from interactive, translanguaging-based activities such as bilingual glossaries, sentence puzzles, and Turkish-English word mapping. These strategies significantly support short-term retention and contextual usage, as evidenced by students' spontaneous use of newly learned vocabulary during unstructured peer discussions.

### 3.4. Vocabulary Post-Test Results (Week 5)

After the instructional phase, both groups completed the same vocabulary test administered during Week 1 to assess vocabulary gains and short-term retention. The post-test scores revealed a statistically significant improvement in favour of the treatment group. An independent samples t-test showed that the treatment group ( $M = 28.13$ ,  $SD = 3.42$ ) outperformed the control group ( $M = 23.27$ ,  $SD = 4.15$ ),  $t(58) = 5.13$ ,  $p < .001$ , as shown in Table 3. The effect size (Cohen's  $d = 1.31$ ) indicated a strong practical significance of the translanguaging-based instruction.

**Table 3**

*Vocabulary Post-Test Scores*

Group	N	Mean (M)	Standard Deviation (SD)	t (df = 58)	p-value	Cohen's d
Treatment Group	30	28.13	3.42	5.13	< .001	1.31
Control Group	30	23.27	4.15			

### 3.5. Learners' Perceptions of Translanguaging Pedagogy (Week 5)

In the final week of the study, semi-structured focus group interviews were conducted with 12 Turkish students from the treatment group to explore their experiences with translanguaging-based vocabulary instruction. The interviews were guided by five open-ended questions examining students' affective responses, vocabulary comprehension, motivation, and instructional preferences. To ensure the reliability and trustworthiness of the qualitative analysis, the thematic coding process was conducted independently by the researcher and an external expert in ELT pedagogy. Following the initial coding, the two coders compared their findings to resolve discrepancies and refine the themes. Inter-rater reliability was calculated using Miles and Huberman's (1994) formula, yielding 92% agreement, indicating a high level of consistency. Thematic analysis of the data revealed four key themes, each quantified to show its prevalence across participants. The frequency and percentage data, along with bilingual representative quotes, are presented in Table 4.

**Table 4**

*Emergent Themes from Focus Group Interviews (N = 12)*

Theme	Frequency (f)	Percentage (%)	Representative Quote
Emotional Comfort and Reduced Anxiety	10	83.3%	<i>"Even if I do not fully understand English, I feel more relaxed when it is supported by Turkish."</i>
Improved Vocabulary Comprehension and Short-term Retention	12	100%	<i>"When I connect the word with Turkish, I do not just memorise it—it stays in my mind with the meaning."</i>
Increased Motivation and Confidence	9	75.0%	<i>"When it is explained in Turkish, I feel more motivated. I feel like I can do it."</i>

Theme	Frequency (f)	Percentage (%)	Representative Quote
Preference for Translanguaging-Based Instruction	11	91.6%	<i>"I think every lesson should be like this. If Turkish is used to support, everyone learns better."</i>

The analysis confirms that the translanguaging-based instruction was perceived positively by the vast majority of learners across cognitive, emotional, and motivational dimensions. All participants (100%) highlighted that vocabulary taught with Turkish support was easier to understand and remember. This aligns with the theoretical assumption that translanguaging serves as a cognitive scaffold, particularly for receptive vocabulary acquisition. Furthermore, 83.3% of students reported feeling more emotionally secure and less anxious during lessons in which Turkish was used alongside English. The emotional comfort fostered a more supportive environment for risk-taking and participation. Regarding motivation, 9 out of 12 students (75%) reported that translanguaging increased their engagement and confidence. Finally, 91.6% of participants expressed a clear preference for bilingual instruction over English-only methods, describing it as more accessible, inclusive, and effective.

#### 4. Conclusion

This study examined the effect of translanguaging strategies on vocabulary acquisition, short-term retention, and learner perceptions among Turkish tenth-grade English as a Foreign Language (EFL) students, employing a quasi-experimental mixed-methods design. The findings indicate that integrating learners' first language (Turkish) into English vocabulary instruction significantly enhanced both immediate learning outcomes and short-term retention. Students who received translanguaging-based instruction outperformed their peers in vocabulary post-tests, demonstrating deeper semantic processing and increased lexical accessibility. Beyond cognitive gains, learners in the treatment group expressed overwhelmingly positive attitudes toward translanguaging, citing improved comprehension, reduced anxiety, and greater motivation. These results affirm the pedagogical value of translanguaging as both a linguistic and affective scaffold, aligning with prior research that views translanguaging not only as a facilitative instructional strategy but also as a vehicle for learner empowerment and identity validation. In contexts like Türkiye, where monolingual ideologies continue to dominate classroom instruction, this study provides empirical support for integrating L1-based strategies into mainstream EFL curricula. Translanguaging pedagogy, when systematically implemented, offers a culturally responsive and academically sound approach to language teaching—one that bridges the gap between national language policies and learners' linguistic realities. Ultimately, this study reinforces the view that acknowledging and leveraging learners' full linguistic repertoires enhances vocabulary learning while fostering more inclusive and equitable educational environments.

While the present study offers valuable insights into the pedagogical benefits of translanguaging in EFL vocabulary instruction, several limitations must be acknowledged. First, the sample consisted of 60 tenth-grade students from a single public high school in southern Türkiye, which may limit the generalizability of the findings to other age groups, regions, or educational contexts. Second, the intervention's duration—three instructional weeks—was relatively short. Longer-term studies are needed to determine the sustainability of vocabulary gains and to examine long-term retention. Third, although the qualitative data from focus group interviews provided rich insights, the study included only Turkish-speaking students, excluding the voices of other potentially marginalised learners, such as Arabic- or Kurdish-speaking students, who could offer different perspectives on translanguaging pedagogy.

##### 4.1. Discussion

The present study aimed to investigate the impact of translanguaging strategies on the vocabulary knowledge, short-term retention, and perceptions of EFL learners regarding bilingual instruction. The findings revealed compelling evidence supporting the efficacy of translanguaging pedagogy in Turkish high school contexts. The findings also aligned with and expanded upon prior scholarship in multilingual education.

#### **4.1.1. Translanguaging and Vocabulary Knowledge**

Addressing the first research question, the study found that students who received translanguaging-based instruction significantly outperformed their peers in the control group on the vocabulary post-test. This result echoes the work of Cenoz and Gorter (2014), who emphasised that translanguaging enables learners to access prior linguistic and conceptual knowledge, thus facilitating deeper lexical encoding. The enormous effect size (Cohen's  $d = 1.31$ ) observed in this study underscores the pedagogical strength of incorporating students' L1 in vocabulary instruction, a point similarly supported by Galante (2021), who documented enhanced vocabulary performance in multilingual EFL settings. The substantial vocabulary gains of the treatment group may be attributed to several mechanisms: bilingual explanations facilitated semantic associations, Turkish-English glossaries reinforced word meaning, and metalinguistic awareness was activated through comparative analysis. For example, students spontaneously linked English words such as "*reliable*" to their Turkish equivalents, demonstrating internalisation through cross-linguistic reasoning. These findings align with Tai's (2024) conclusion that translanguaging enhances conceptual understanding by reducing cognitive overload.

#### **4.1.2. Vocabulary Retention and Cognitive Scaffolding**

In response to the second research question, the study demonstrated that translanguaging not only enhanced immediate word learning but also facilitated short-term retention. Interview data and teacher field notes indicated that bilingual instructional tasks, such as dual-language storytelling and collaborative glossary creation, helped solidify memory traces. This aligns with Cui and Pacheco (2023), who observed that L1 scaffolding facilitates deeper cognitive processing of L2 vocabulary, particularly among lower-proficiency learners. Interestingly, the absence of significant differences at the pre-test stage, followed by pronounced differences post-intervention, suggests that translanguaging was the key variable influencing outcomes. This confirms prior claims by Bolkvadze (2023) and Huang & Chalmers (2023) that translanguaging serves not merely as a cultural accommodation but as a cognitively effective strategy that boosts short-term retention through accessible input and repetition across linguistic channels.

#### **4.1.3. Learner Perceptions and Emotional-Motivational Dynamics**

The third research question explored learners' perceptions of translanguaging during vocabulary instruction. Thematic analysis revealed overwhelmingly positive attitudes. Students reported reduced anxiety, improved comprehension, and increased motivation when Turkish was integrated into English instruction. These findings align with the emotional comfort themes identified by Back et al. (2020) and Rajendram et al. (2022), who argue that translanguaging enhances emotional security, enabling students to take intellectual risks and participate more actively in the learning process. Moreover, 91.6% of students expressed a strong preference for bilingual instruction, suggesting that translanguaging may increase learner agency and ownership of the learning process. This supports García & Kleyn's (2016) view of translanguaging as an "ideological shift" that validates students' full linguistic identities. In this regard, the classroom becomes a translanguaging space (Wei, 2011), where students are not constrained by monolingual norms but empowered through linguistic flexibility.

#### 4.1.4. Broader Implications and Contextual Reflections

The translanguaging approach used in this study appears particularly relevant in contexts such as Türkiye, where students' linguistic realities often clash with English-only instructional policies. While Turkish EFL learners benefit cognitively and emotionally from translanguaging, this study also suggests that their gains have cultural underpinnings. Turkish students received structured exposure to English through formal schooling and social environments, resulting in significant gains in lexical knowledge. These results reflect the specific sociocultural context of the participants. Specifically, Turkish students' vocabulary development may be attributed to systemic familiarity with formal English education within the national school system. By aligning pedagogical practices with learners' primary cognitive-linguistic resources, translanguaging offers a transformative path for English instruction in similar EFL settings.

#### 4.2. Implications for Future Research

Subsequent studies should include a more varied linguistic cohort and extend to diverse educational environments, such as rural and urban schools and refugee-inclusive classrooms. Comparative studies across different L1 backgrounds would deepen our understanding of how translanguaging functions in multiethnic and multilingual EFL contexts. Additionally, longitudinal research tracking vocabulary development over multiple semesters could yield more nuanced insights into the durability and cumulative effects of translanguaging strategies. Finally, future investigations explore teacher perspectives, institutional attitudes, and classroom constraints to better inform the design of translanguaging-based curricula that are both pedagogically effective and contextually feasible.

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