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THE ROLE OF VISUAL AIDS IN TEACHING ENGLISH VOCABULARY

Temirxonova Shaxzoda Qobilovna
Student of Samarkand State Institute of Foreign Languages
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Abstract

Vocabulary lies at the very heart of communicative competence, yet many English as a Foreign Language (EFL) classrooms still lean on rote memorisation and translation, methods that rarely produce durable retention. This paper examines the pedagogical potential of visual aids — pictures, flashcards, realia, video, and digital tools — for teaching English vocabulary, and situates this potential within Dual Coding Theory and the Cognitive Theory of Multimedia Learning. Drawing on a synthesis of recent empirical studies from Vietnam, Malaysia, Uzbekistan, Saudi Arabia, Albania, Pakistan, and Thailand, alongside an original small-scale study conducted with thirty-two first-year EFL university students in Uzbekistan, the paper compares vocabulary gains and learner engagement between visually supported instruction and traditional, text-based teaching. Participants who received visual-aid-supported instruction achieved considerably higher post-test scores and reported markedly higher motivation than those taught conventionally. The findings confirm that visual input strengthens both the cognitive and affective dimensions of vocabulary learning. The paper closes with concrete pedagogical recommendations for EFL instructors and a call for larger-scale research within Central Asian classrooms specifically.

Keywords

visual aids, vocabulary acquisition, EFL, retention, dual coding theory, teaching methods

Annotatsiya

Lug'at boyligi kommunikativ kompetensiyaning mohiyatini tashkil etadi, biroq ko'plab ingliz tilini chet tili sifatida o'qitish (EFL) darslarida hamon yodlash va tarjimaga tayaniladi, bunday usullar esa uzoq muddatli esda saqlashni kamdan-kam ta'minlaydi. Ushbu maqolada ingliz tili lug'atini o'qitishda vizual vositalar — rasmlar, flesh-kartalar, real buyumlar, video va raqamli vositalarning pedagogik imkoniyatlari tahlil qilinadi hamda bu imkoniyatlar Ikkilamchi kodlash nazariyasi (Dual Coding Theory) va Multimedia orqali o'rganishning kognitiv nazariyasi doirasida asoslanadi. Vetnam, Malayziya, O'zbekiston, Saudiya Arabistoni, Albaniya, Pokiston va Tailanddagi so'nggi empirik tadqiqotlar sintezi hamda O'zbekistonda o'ttiz ikki nafar birinchi kurs EFL talabalari bilan o'tkazilgan original kichik hajmli tadqiqot asosida maqolada vizual vositalar bilan qo'llab-quvvatlangan o'qitish va an'anaviy, matnga asoslangan o'qitish o'rtasida lug'at o'zlashtirish natijalari va o'quvchilarning faolligi taqqoslanadi. Vizual vositalar yordamida o'qitilgan ishtirokchilar yakuniy testda sezilarli darajada yuqori ballarga erishdi va an'anaviy usulda o'qitilganlarga nisbatan ancha yuqori motivatsiyani bildirdi. Natijalar vizual axborot lug'at o'rganishning kognitiv va affektiv jihatlarini ham mustahkamlashini tasdiqlaydi. Maqola yakunida EFL o'qituvchilari uchun aniq pedagogik tavsiyalar berilgan hamda xususan Markaziy Osiyo sinflarida kengroq ko'lamli tadqiqotlar o'tkazish zarurligi ta'kidlangan.

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Kalit so'zlar: vizual vositalar, lug'at o'zlashtirish, EFL, esda saqlash, ikkilamchi kodlash nazariyasi, o'qitish usullari

Аннотация

Словарный запас лежит в самой основе коммуникативной компетенции, однако во многих классах английского как иностранного языка (EFL) по-прежнему преобладают механическое заучивание и перевод — методы, которые редко обеспечивают долговременное запоминание. В статье рассматривается педагогический потенциал визуальных средств — изображений, флеш-карточек, реальных предметов, видео и цифровых инструментов — при обучении английской лексике, и этот потенциал осмысляется в рамках теории двойного кодирования (Dual Coding Theory) и когнитивной теории мультимедийного обучения. На основе обобщения современных эмпирических исследований из Вьетнама, Малайзии, Узбекистана, Саудовской Аравии, Албании, Пакистана и Таиланда, а также оригинального небольшого исследования с участием тридцати двух студентов первого курса, изучающих английский как иностранный в Узбекистане, в статье сравниваются результаты усвоения лексики и вовлечённость обучающихся при обучении с опорой на визуальные средства и при традиционном текстовом подходе. Участники, обучавшиеся с использованием визуальных средств, показали значительно более высокие результаты итогового теста и сообщили о заметно более высокой мотивации по сравнению с теми, кого обучали традиционно. Полученные данные подтверждают, что визуальная информация усиливает как когнитивное, так и эмоциональное измерения изучения лексики. В заключение даны конкретные педагогические рекомендации для преподавателей английского языка и сформулирован призыв к проведению более масштабных исследований, в частности в классах Центральной Азии.

Ключевые слова: визуальные средства, усвоение лексики, EFL, запоминание, теория двойного кодирования, методы обучения

1. Introduction

Words function as the basic currency of human communication; without an adequate stock of them, even flawless grammar leaves little to say (Wilkins, 1972, as cited in Dang, 2023). For English as a Foreign Language learners, vocabulary is not a peripheral skill but the very foundation on which listening, speaking, reading, and writing are built. Yet vocabulary instruction in many classrooms still relies heavily on repetition, translation, and isolated word lists — approaches that learners often find tedious and that rarely lead to durable, usable knowledge (Chai, Rosman, & Basri, 2021).

Visual aids offer an alternative. Broadly defined, visual aids encompass any instructional material that engages the sense of sight to support learning — pictures, flashcards, realia, posters, charts, video, and, increasingly, digital tools such as applications, infographics, and animated films (Shabiralyani, Hasan, Hamad, & Iqbal, 2015). By pairing an unfamiliar word with a concrete image or scene, visual aids give abstract vocabulary a tangible anchor, reducing the cognitive effort needed to grasp and retain new lexical items.

Despite a substantial and growing body of research on visual aids in EFL vocabulary instruction across contexts as varied as Vietnam, Malaysia, Saudi Arabia, Thailand, and Pakistan, comparatively little classroom-based research has examined how these techniques perform in Central Asian, and

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specifically Uzbekistani, university settings — even though a handful of recent studies conducted at Uzbek institutions (e.g., Akbarova & Jabborova, 2026) suggest the same benefits observed elsewhere. This paper therefore pursues two aims: first, to synthesise existing empirical and theoretical work on visual aids in vocabulary teaching; second, to report an original classroom study conducted with EFL university students in Uzbekistan, comparing vocabulary gains and motivation between a visually supported group and a traditionally taught group. The guiding research question is: to what extent do visual aids enhance vocabulary acquisition and learner engagement compared with conventional, text-based instruction?

2. Literature Review

2.1 Types of Visual Aids

Visual aids used in vocabulary teaching fall into several overlapping categories. Static images — photographs, drawings, and illustrations — remain the most widely used, appearing in nearly every EFL textbook (Konomi, 2014). Flashcards pair a word with a picture on a single card and are prized for their portability; Konomi's (2014) survey of Albanian primary teachers found flashcards were used "often" or "always" by the majority of Grade 3 instructors. Realia, meaning real physical objects brought into the classroom, was reported as one of the most consistently used aids in the same study, particularly for younger learners, echoing the widely repeated view that authentic objects outperform pictures whenever they are available (Allen, 1983, as cited in Konomi, 2014). Beyond static materials, moving-image input — video clips, cartoons, and full-length animated films — has attracted growing research interest. Alhujaylan (2024) demonstrated that Saudi EFL learners who watched segments of an animated film accompanied by subtitles, and especially by subtitles with glossed keywords, outperformed peers who viewed the same footage without any text support. Finally, digital tools — vocabulary applications, quiz games, and multimedia presentations — represent the newest and fastest-growing category; Suwanasilp and Durongbhandhu (2023) designed and tested a dedicated picture-based vocabulary application for exactly this purpose.

2.2 Theoretical Framework

The theoretical case for visual aids rests chiefly on Paivio's (1990) Dual Coding Theory, which proposes that the human mind processes information through two partially independent channels: a verbal channel for language and a non-verbal channel for imagery. When a new word is encountered alongside a relevant picture, the learner forms two mental traces rather than one, and this redundancy measurably strengthens recall (Dang, 2023). Mayer's (2009) Cognitive Theory of Multimedia Learning builds on this dual-channel assumption and adds two further principles: that working memory has a limited capacity, so instructional materials must avoid overloading it with irrelevant detail, and that genuine learning requires active cognitive processing rather than passive exposure. Suwanasilp and Durongbhandhu (2023) applied this framework directly when designing their picture-based application, deliberately limiting each screen to a single target word, its image, and a brief example sentence, in order to keep cognitive load manageable. Taken together, these two frameworks explain why pairing a word with an image is rarely mere decoration: it is a distinct encoding mechanism with its own memory-boosting effect.

2.3 Empirical Evidence

A striking feature of this literature is how consistent the direction of the effect is, even as contexts, ages, and methods vary sharply. In Vietnam, Dang (2023) randomly assigned sixty-two university-level

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EFL learners to a visual-aids group or a traditional-instruction group; the visual-aids group's post-test mean rose significantly, and the improvement was largest among learners at the lowest initial proficiency level — a finding with clear implications for weaker students. In Malaysia, Chai, Rosman, and Basri (2021) combined visual aids with explicit word-recognition instruction to teach action verbs to fifty Year 4 primary pupils; despite no pre-existing difference between the groups, the experimental group's post-test mean exceeded the control group's by more than seventeen points. Closer to the setting of the present study, Akbarova and Jabborova (2026), working with elementary-level EFL learners at a state pedagogical university in Uzbekistan, found that more than ninety percent of students exposed to pictures, flashcards, and short videos agreed or strongly agreed that these materials helped them learn new vocabulary, compared with markedly less favourable responses from the traditionally taught control group.

Audiovisual and digital formats extend the same logic. Alhujaylan (2024), testing 127 Saudi university students who watched a segmented animated film, found that both a subtitled group and a group receiving subtitles with glossed keywords significantly outpaced a no-subtitle baseline group on tests of meaning recognition, form recognition, meaning recall, and form recall; the glossed-keyword condition produced the strongest and most durable gains, still visible on a delayed post-test given weeks later. In Thailand, Suwanasilp and Durongbhandhu (2023) built a bespoke picture-based vocabulary application and found that twenty-four undergraduates who used it for ten short sessions moved from a mean pre-test score of 28.17 to 44.58 out of seventy, a statistically significant gain that dwarfed the negligible improvement recorded by an untreated control group.

Beyond vocabulary scores themselves, several studies document a parallel boost in classroom atmosphere and learner attitude. Shabiralyani, Hasan, Hamad, and Iqbal's (2015) large survey of two hundred teachers and students in Dera Ghazi Khan, Pakistan, found that respondents overwhelmingly credited visual aids with sustaining motivation, clarifying difficult content, saving preparation time and, notably for the present topic, directly enlarging students' vocabulary. Konomi's (2014) classroom observation in Albania offers a vivid illustration at the level of a single lesson: when a Grade 3 teacher used only a textbook to teach weather vocabulary, 85% of pupils matched words to pictures correctly afterward; when the same teacher used flashcards and blackboard drawings to teach fruit vocabulary the following day, accuracy rose to 97%. Small as it is, this comparison captures precisely why visual aids matter: not because they replace explanation, but because they give explanation something concrete to attach itself to.

2.4 Research Gap

Two gaps stand out. First, although the effect of visual aids appears remarkably stable across very different countries and age groups, only a small and recent body of work — represented here mainly by Akbarova and Jabborova (2026) — has examined the question inside Uzbekistan itself, and that work has so far focused on a single institution and a narrow age range. Second, few studies combine a quantitative vocabulary measure with a parallel measure of learner motivation in the same Uzbek sample, which makes it difficult to say whether gains in test scores are accompanied by the same gains in engagement reported elsewhere. The present study addresses both gaps directly.

3. Methodology

3.1 Participants

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Thirty-two first-year students (19 female, 13 male), enrolled in a general English course at a state university in Uzbekistan, took part in the study. Their proficiency, based on a placement test administered at the start of the semester, ranged from A2 to B1 on the CEFR scale. Participants were divided into two intact groups of sixteen: an experimental group, taught with visual aids, and a control group, taught through conventional, text-based instruction. Both groups were taught by the same instructor, which helped rule out teacher effects as a confounding variable.

3.2 Design

The study used a quasi-experimental, pre-test/post-test design supplemented with a short questionnaire, following the same broad logic as Dang (2023) and Chai et al. (2021). Over four weeks, each group covered the same forty target words, drawn from an intermediate coursebook wordlist and grouped into four thematic sets: travel, health, environment, and work. The control group learned the words through translation, definitions, and repetition drills. The experimental group learned the identical words through flashcards, short video clips, and a simple slideshow pairing each word with an image and an example sentence, broadly mirroring the picture-based approach used by Suwanasilp and Durongbhandhu (2023).

3.3 Instruments

Vocabulary knowledge was measured with a forty-item multiple-choice test, administered identically before and after the four-week intervention. A follow-up questionnaire, adapted from the format used by Suwanasilp and Durongbhandhu (2023), asked the experimental group to rate five statements about their learning experience on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree).

4. Results

Table 1 summarises the pre-test and post-test scores of both groups. Both groups improved over the four weeks, but the experimental group's gain was considerably larger.

Group	N	Pre-test M (SD)	Post-test M (SD)	Gain
Control (traditional)	16	14.8 (2.9)	19.2 (3.4)	4.4
Experimental (visual aids)	16	15.1 (3.1)	27.6 (3.8)	12.5

An independent-samples t-test comparing post-test scores showed a statistically significant difference in favour of the experimental group, $t(30) = 6.42$, $p < .001$, consistent with the magnitude of the gap reported by Chai et al. (2021) in their Malaysian sample. Table 2 presents the experimental group's responses to the follow-up questionnaire.

Statement	M	SD
The lesson was interesting and enjoyable.	4.35	0.58
I found it easier to remember words shown with pictures or video.	4.42	0.51
I paid closer attention during the lesson than usual.	4.18	0.65
I would like more lessons taught this way.	4.47	0.55
I felt less anxious speaking about the new words.	4.02	0.71

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Every item received a mean rating above 4.0, indicating strong agreement across the board, with the statement concerning ease of remembering words shown alongside pictures or video receiving the second-highest score of all five items.

5. Discussion

The pattern observed here — a substantially larger post-test gain for the visually supported group, alongside strongly positive learner attitudes — mirrors the findings of Dang (2023) in Vietnam and Chai et al. (2021) in Malaysia almost exactly, despite differences in learners' age and proficiency level. It also extends the recent Uzbek evidence reported by Akbarova and Jabborova (2026), whose sample consisted of elementary-level learners at a single pedagogical university, to an intermediate-level, first-year university population, suggesting that the benefit of visual input is not confined to beginners.

The size of the vocabulary gain is readily explained through Dual Coding Theory (Paivio, 1990): learners in the experimental group encoded each target word twice, once verbally and once visually, which likely produced a more resilient memory trace than the single verbal encoding available to the control group. The questionnaire results, meanwhile, echo Shabiralyani et al.'s (2015) finding that visual aids sustain motivation and reduce the perceived dullness of a lesson; the comparatively lower, though still positive, rating for reduced speaking anxiety suggests that visual aids may support vocabulary recognition more directly than they support the confidence needed for spontaneous oral use, a nuance also raised by Alhujaylan (2024) in relation to receptive versus productive vocabulary gains.

Several limitations temper these conclusions. The sample was small and drawn from a single institution, the intervention lasted only four weeks, and no delayed post-test was administered to check whether the experimental group's advantage would persist over time — a precaution that proved decisive in Alhujaylan's (2024) study, where the glossed-keyword group's lead widened rather than narrowed on a delayed test. Motivation was also measured only in the experimental group, which prevents a direct comparison of engagement between conditions.

6. Conclusion

This paper set out to examine how visual aids influence English vocabulary learning, combining a review of research from seven countries with an original study conducted among Uzbek university EFL students. Both strands point to the same conclusion: pairing new vocabulary with pictures, video, or other visual support measurably improves both retention and learner motivation, regardless of learners' age, proficiency level, or cultural setting.

For classroom practice, three recommendations follow. First, visual aids should be treated as a core instructional resource rather than an occasional supplement, woven into the regular presentation and practice of new vocabulary (Akbarova & Jabborova, 2026). Second, teachers need not rely solely on costly technology; realia, flashcards, and simple board drawings proved just as central to learning gains as digital tools across the studies reviewed here (Konomi, 2014; Shabiralyani et al., 2015). Third, where digital tools are available, they should be designed, or selected, with cognitive load in mind, following the principle that a small number of well-chosen images teaches more effectively than a cluttered screen (Mayer, 2009; Suwanasilp & Durongbhandhu, 2023).

Future research should extend the present study to a larger, multi-institutional sample across Uzbekistan, include a delayed post-test to assess long-term retention, and compare different visual modalities directly, since Alhujaylan's (2024) findings suggest that not all forms of visual support are

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equally effective. A longitudinal design tracking the same learners across an academic year would also help clarify whether the motivational gains observed here translate into sustained vocabulary growth over time.

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