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A WORD AND ITS STRUCTURE IN ENGLISH MORPHOLOGY THROUGH MODERN EDUCATIONAL TECHNOLOGIES

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Abstract: This article provides a scientific analysis of the role of modern technologies in teaching word structure, morphological analysis, and teaching in English, as well as the effective use of interactive methods in helping students independently learn word structure using digital corpora, interactive tools, and an artificial intelligence platform.

Keywords: *English morphology, word structure, morphemes, digital learning, AI-assisted instruction*

Annotatsiya: Mazkur maqolada ingliz tilida so‘zlarning tuzilishi, morfologik taxlili va o‘qitishda zamonaviy texnologiyalarning o‘rni, qolaversa raqamli korpuslar, interaktiv vositalar va sun’iy intellekt platformasi yordamida o‘quvchilarga so‘zning tuzilishini mustaqil o‘rganashdagi interraktiv metodlardan samarali foydalanish bo’yicha ilmiy taxlillar olib borilgan.

Kalit so‘zlar: *Ingliz tili morfologiyasi, so‘z tuzilishi, morfemalar, raqamli ta’lim, sun’iy intellekt*

Аннотация: В данной статье представлен научный анализ роли современных технологий в обучении структуре слова, морфологическому анализу и преподаванию английского языка, а также эффективного использования интерактивных методов, помогающих студентам самостоятельно осваивать структуру слова с помощью цифровых корпусов, интерактивных инструментов и платформы искусственного интеллекта.

Ключевые слова: *английская морфология, структура слова, морфемы, цифровое обучение, обучение с ИИ.*

Morphology is a fundamental component of linguistic studies, investigates the composition of words and the rules governing their formation. Understanding word structure is essential for mastering vocabulary, interpreting semantic nuances, and applying grammatical principles. English words can be classified as simple, complex, or

compound, each category reflecting unique structural and semantic properties.

Advances in educational technology, such as online corpora, AI-based learning platforms, and interactive morphological software, have significantly influenced the teaching of word structure. These tools provide authentic examples and allow learners to experiment with word formation in meaningful contexts, thereby enhancing engagement and comprehension of abstract linguistic concepts.

For examples: book – a single morpheme, represents a physical object, run – verb expressing action, cat – noun representing an animal.

Complex words consist of a root plus derivational or inflectional affixes.

Derivational morphology: Affixes change the grammatical category or meaning of a word teach → teacher verb → noun; adding -er denotes the agent performing the action, happy → happiness adjective

noun; adding -ness forms an abstract noun, modern → modernize adjective → verb; adding -ize creates a verb. Inflectional morphology affixes indicate grammatical information without changing the word class walk → walked past tense, child → children plural, run → running present participle/continuous tense.

Compound words are formed by combining two or more independent bases to create a single lexical unit. Compounds can be endocentric (headed) or exocentric (headless). Endocentric compounds, one component determines the category of the whole. For example: *classroom → class + room* the head room defines the object; class specifies function, *toothbrush → tooth + brush* head brush identifies the object, tooth modifies.

Exocentric compounds are not directly derived from the components. For instance: *redhead* → a person with red hair, not a type of head, pickpocket → a thief, not a pocket.

Understanding the structure of words through these categories helps learners:

Decode unfamiliar words. Identify grammatical roles and semantic patterns. Apply vocabulary more accurately in writing and speech. Morphology is not only about memorizing words but also about analyzing how morphemes combine to create meaning, enabling learners to understand, create, and interpret words effectively.

Recent advances in educational technology, including online corpora, AI-based learning platforms, and interactive morphological software, have transformed the way word structure is taught. These tools provide authentic language examples and enable learners to practice and experiment with word formation in context, making abstract morphological concepts easier to understand.

Examples of application: Online corpora learners can explore real-world usage of words and their derivatives. Searching for “organize” in a corpus shows sentences like: “She organizes events every month.” Searching for “organization” reveals noun usage: “The organization promotes literacy programs.” This helps students distinguish between verbs and nouns in authentic contexts. Interactive morphological tools allow students to segment words into morphemes and construct new words such as *happy* → *happiness* adjective → noun, *teach* → *teacher* verb → noun, *create* → *creative* → creativity verb → adjective → noun the learners can drag and drop morphemes to form new words, reinforcing understanding of derivational rules.

AI systems provide personalized exercises and feedback. If a student struggles with exocentric compounds, the platform can generate contextual sentences for practice: redhead → “The redhead sat at the front of the class.” pickpocket → “The pickpocket was caught by the police.” Immediate feedback helps learners understand semantic meaning and usage. These technological tools, learners actively engage with morphology, observe patterns in authentic language, and gain confidence in word formation and usage.

Morphology is a core branch of linguistics that studies the internal structure of words and the rules governing their formation. Understanding word structure is essential for vocabulary acquisition, grammatical competence, and semantic interpretation. English words can be classified as simple, complex, or compound, each type exhibiting unique structural and semantic properties.

Simple words consist of a single morpheme and carry independent meaning. They cannot be divided further. Examples: sky (natural object), jump (action), leaf (plant part).

Complex words are formed through derivation or inflection. Derivational Morphology – creates new words by adding affixes, which may change the grammatical category or meaning, hope → hopeful (verb → adjective), nation → nationalize (noun → verb), quick → quickly (adjective → adverb)

Inflectional Morphology – modifies words to indicate grammatical features without changing their class, talk → talks (third-person singular), run → running (present participle), mouse → mice (plural).

Compounds are formed by combining two or more roots. They are categorized as endocentric (headed) or exocentric (headless). The head determines the category, bookshelf → book + shelf, notebook → note + book. The meaning is not deducible from components, scarecrow → a figure to scare birds, blackmail → coercion by threats

Analyzing these word types allows learners to recognize morphological patterns, infer meaning from context, and predict the

function of unfamiliar words. The use of modern technologies in teaching morphology has significantly enhanced learner engagement and understanding. Provide authentic examples of language usage, enabling learners to observe contextual differences between related forms: analyze → “Researchers analyze data carefully,” analysis → “The analysis revealed important trends.” Allow learners to segment words into morphemes, construct new forms, and practice independently: act action → actionable, play → playful → playfulness. AI-based Learning Platforms

Offer personalized exercises, adaptive feedback, and performance tracking: daydream → “She often daydreams during class.” homesick → “He felt homesick after moving to another city.” Game incorporates quizzes, drag-and-drop word-building tasks, and challenges to reinforce morpheme recognition and semantic understanding in an interactive format.

Morphology enables learners to decode, interpret, and construct words systematically. Technology enhances learner autonomy, provides authentic data, and supports individualized instruction. Integration of interactive tools, AI platforms, and corpora facilitates deeper understanding of morphological structures and practical application in language use. Corpus-Based Analysis, Learners can study authentic language data to identify patterns in word usage and formation.

For example, comparing “develop” and “development” allows students to see how the verb and its derived noun function differently in sentences: “Engineers develop new software daily.” “The development of new software is costly.”

Interactive Morphological Tools, digital platforms enable learners to break down words into morphemes, create new words, and evaluate their understanding independently. For instance: play → playful → playfulness, act → action → actionable. Students can visually manipulate morphemes to experiment with word formation rules.

AI-Assisted Learning artificial intelligence systems provide customized exercises, track learners’ progress, and deliver immediate corrective feedback. For example: A student struggling with exocentric compounds like “bookworm” can receive context-based practice: “The bookworm stayed late in the library.” The system highlights the meaning beyond the literal components. Drag-and-drop activities where students form new words from roots and affixes. Timed quizzes asking learners to identify the head in compounds such as “sunflower” or “toothpaste”.

These interactive tasks encourage repeated practice while making learning enjoyable.

Modern educational technologies allow learners to engage actively with morphology, analyze authentic examples, receive individualized

feedback, and reinforce knowledge through interactive, game-like formats. Pedagogical Implications of Technology in Teaching Morphology. Integrating theoretical instruction with technology-enhanced practice fosters active, autonomous learning. Learners gain practical skills in analyzing word structures, decoding unfamiliar vocabulary, and developing metalinguistic awareness, which is essential for advanced language proficiency. Interactive exercises such as platforms that allow students to segment words, construct new forms, or classify compounds help reinforce morphological rules. For example: Students practice forming adjectives from verbs, e.g., educate educational → educator, receiving immediate feedback on correctness. Authentic examples: Using corpus data or real-life contexts helps learners see how words and their derivatives function in communication. “The committee organized a meeting.” vs. “The organization promotes environmental awareness.” Visualizations are morphological charts, diagrams or color-coded morpheme breakdowns enhance understanding and memory retention. A diagram showing play playful → playfulness highlights the derivational steps and suffixes.

Technology also supports personalized learning and continuous assessment:

Students can progress at their own pace, revisiting challenging forms as needed.

Automated quizzes and feedback systems allow learners to identify errors in real time and correct them efficiently. For example: A learner consistently misidentifying exocentric compounds, like “bookworm” or “highbrow”, can receive targeted exercises until mastery is achieved. Traditional instruction with technology-based activities strengthens analytical skills, promotes independent learning, and ensures effective mastery of morphological structures.

Teaching the internal structure of English words is greatly enhanced by modern educational technologies. Integrating interactive tools, AI-assisted platforms, and corpus-based analysis supports effective learning by fostering active engagement, analytical thinking, and independent exploration. For instance, learners using an AI platform can practice derivational patterns such as act → action → actionable, receiving immediate feedback that reinforces understanding. Similarly, corpus analysis allows students to compare words like develop and development in authentic contexts: “Engineers develop new software daily.” (verb) “The development of new software requires funding.” (noun). Interactive exercises and game activities also help students recognize patterns in compounds, such as distinguishing headed compounds (bookshelf → book + shelf) from headless compounds

(scarecrow → a figure to scare birds), making abstract morphological rules tangible.

Overall, the integration of these technologies enhances comprehension, supports personalized learning, and equips learners with the skills necessary for independent word analysis and practical language use. This approach ensures that students not only memorize rules but also apply them effectively in real contexts.

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