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AN INNOVATIVE METHODOLOGICAL MODEL FOR DEVELOPING THE LEXICAL SKILLS OF FUTURE ENGLISH TEACHERS BASED ON A COGNITIVE-LINGUISTIC APPROACH

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Abstract: This article details the development and empirical validation of an innovative methodological model designed to enhance the lexical skills of future English language teachers using a cognitive-linguistic approach. Moving away from traditional rote-learning systems, the study integrates conceptual metaphor theory, mental spaces, and cognitive categorization into foreign language pedagogy. The framework balances structural and cognitive principles to transition vocabulary from passive recognition to active, fluent conceptualization. Methodological efficiency was verified through a structured pedagogical experiment involving undergraduate students at the Samarkand State Institute of Foreign Languages. The statistical outcomes indicate substantial quantitative and qualitative growth in the experimental group across all evaluation parameters.

Keywords: cognitive linguistics, lexical skills, future teacher, English language, conceptual metaphor, methodological model.

Introduction

Modern foreign language education in Uzbekistan demands a thorough transformation of pedagogical strategies, shifting the focus from simple communicative reproduction to deep cognitive processing. The professional readiness of a future English language teacher is heavily reliant on their lexical competence, which serves as the core framework for advanced discourse processing, curriculum design, and classroom management. A teacher must understand not only the direct dictionary meanings of words but also the complex network of conceptual associations, cultural metaphors, and idiomatic networks that dictate natural language use.

However, traditional vocabulary teaching models in higher education institutions frequently rely on explicit, structural learning strategies. Under this paradigm, lexical units are typically presented in isolated lists, mechanical translation activities, or static reading comprehension tasks. Such methods ignore the cognitive mechanisms governing lexical selection, mental processing, and mental space construction. Consequently, graduating students often struggle with semantic choice errors, an over-reliance on literal translations, and a clear lack of professional-lexical flexibility when navigating spontaneous educational settings.

To resolve these institutional limitations, this study utilizes the theoretical frameworks of cognitive linguistics, particularly prototype theory, conceptual metaphor theory, and frame semantics. This approach treats vocabulary acquisition not as the simple accumulation of separate linguistic units, but as a systematic process of building structured mental models and cognitive representations. The purpose of this research is to build, implement, and analyze an innovative methodological model rooted in the cognitive-linguistic approach to maximize the quality of lexical skill development among future English language teachers.

Methodology

The structural implementation of the research was conducted within the foreign language departments of the Samarkand State Institute of Foreign Languages. The

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experimental architecture involved a total sample size of 60 undergraduate students, distributed equally into an experimental group (30 students) and a control group (30 students) to guarantee accurate statistical comparisons.

The control group continued their educational program utilizing traditional communicative, textbook-reliant approaches focusing on standard structural-semantic vocabulary tasks. In contrast, the experimental group was exposed to a custom-designed cognitive-linguistic methodological model. This alternative curriculum replaced simple word memorization with three integrated cognitive-procedural phases:

The Conceptual Categorization Phase: Students mapped target lexical units into systematic semantic frames and cognitive domains, analyzing the semantic boundaries between radial categories and focal prototypes.

The Metaphoric Mapping Phase: Lexical structures, specialized phrasal verbs, and complex idioms were explored through conceptual metaphor frameworks (e.g., analyzing how expressions related to "time" map onto the domain of "money"), turning arbitrary language rules into structured, logical patterns.

The Discourse Contextualization Phase: Students utilized their conceptual networks to actively build fluid mental spaces during simulated teaching tasks, case-study resolutions, and peer-to-peer instructional sessions.

The evaluation of student performance utilized a structured pre-test and post-test design. The qualitative and quantitative evolution of students' lexical skills was analyzed across four criteria, each scored on a 100-point scale: Semantic Precision (exact selection based on context), Concept Retention (long-term retrieval stability), Metaphoric Fluency (natural integration of non-literal language), and Professional-Discourse Flexibility (adaptive vocabulary use during teaching simulations). The statistical integrity of the data was verified using basic descriptive statistics and mean distribution comparisons.

Results

The empirical results collected upon the completion of the pedagogical intervention confirmed the significant instructional value of the cognitive-linguistic methodological model. The comparative metrics illustrating the pre-test and post-test values across the research groups are presented in the table below.

Lexical Skill Enhancement Dynamics Across Evaluation Criteria (100-point scale)

Group Identifiers and Criteria	Pre-Test Average Score	Post-Test Average Score	Absolute Net Performance Gain
Experimental Group (Cognitive Model)			
Semantic Precision	44.3	88.6	+44.3
Concept Retention	41.5	85.1	+43.6
Metaphoric Fluency	36.8	82.4	+45.6
Professional-Discourse Flexibility	33.2	79.8	+46.6
Control Group (Traditional Framework)			

Semantic Precision	43.8	61.2	+17.4
Concept Retention	42.0	56.4	+14.4
Metaphoric Fluency	37.1	51.5	+14.4
Professional-Discourse Flexibility	34.0	48.7	+14.7

The data confirms that both student cohorts possessed comparable lexical baselines prior to the experiment. However, the post-test evaluations revealed distinct differences. The experimental group exhibited net improvements exceeding 43 points in every performance category. The most pronounced divergence occurred within "Professional-Discourse Flexibility," where the control group grew by a modest 14.7 points, while the experimental group displayed a 46.6-point surge.

Qualitative transcripts from classroom observations and final oral assessments confirmed that students trained under the cognitive model relied far less on native language interference. Instead of clumsily translating ideas word-for-word, they smoothly accessed coherent conceptual frames, using advanced academic vocabulary, accurate idioms, and natural phrasal structures with minimal cognitive hesitation.

Discussion

The distinct success of the cognitive-linguistic model over traditional pedagogical frameworks requires an analytical exploration of the cognitive processes that drive language learning. Traditional structural methods often separate language acquisition from human cognition. They treat the mental lexicon as an unorganized, passive repository of arbitrary dictionary tags. This causes a major disconnect between a student's internal concept formation and their external linguistic production.

By contrast, our experimental model builds directly on the human brain's natural cognitive processing systems. Organizing new words into clear conceptual frames helps students establish deep semantic networks. This contextual structure prevents new words from quickly fading from memory, solving a major issue in traditional classrooms where vocabulary is forgotten soon after a test is completed.

Furthermore, incorporating conceptual metaphor theory allowed future teachers to understand the underlying logic behind figurative language, idiomatic expressions, and stylistic collocations. Rather than viewing English idioms as random, chaotic rule exceptions, students recognized them as a structured reflection of conceptual patterns. This understanding lowers the psychological anxiety and cognitive load associated with learning advanced vocabulary.

These findings align with international research in cognitive pedagogy, which highlights that language learning is most successful when it is tied directly to real-world experience, contextual mapping, and explicit conceptual analysis. Empowering future teachers with this cognitive awareness enhances their personal linguistic fluency and gives them the professional tools needed to explain complex vocabulary structures to their future students.

Conclusion

The implementation of this research at the Samarkand State Institute of Foreign Languages demonstrates that a cognitive-linguistic approach provides a highly structured and pedagogically superior alternative to traditional vocabulary instruction. By moving beyond passive word memorization, the innovative model successfully links linguistic signs directly

to their underlying conceptual structures. This transformation turns abstract vocabulary into an active tool for professional pedagogical communication.

To implement these findings across higher foreign language education, the following methodological actions are recommended:

Redesign current English practical curricula to replace random vocabulary lists with systematically organized conceptual domains and frame-based lexicons.

Embed explicit conceptual metaphor and cognitive categorization strategies directly into the classroom methods used by language faculties.

Use case-studies, problematic educational situations, and simulated teaching environments to encourage students to actively activate their mental conceptual networks.

Organize targeted professional development courses to help faculty transition from purely structural, translation-based methods to modern cognitive-pedagogical strategies.

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