

**PHRASEOLOGICAL COMPETENCE DIAGNOSTIC INDICATORS (FCDI): A
COGNITIVE APPROACH TO ASSESSING EFL LEARNERS' PHRASEOLOGICAL
PROFICIENCY**

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Abstract. Despite growing scholarly interest in phraseological competence within EFL contexts, a standardized diagnostic framework for assessing learners' phraseological proficiency has remained largely absent in applied linguistics literature. This article introduces the Phraseological Competence Diagnostic Indicators (FCDI) system — a comprehensive, criterion-referenced assessment framework developed and empirically validated within the Uzbekistani higher education context. Drawing on a cognitive linguistic theoretical base, the FCDI integrates four measurable dimensions: semantic accuracy, pragmatic appropriateness, contextual precision, and stylistic sensitivity. The framework was tested with 370 philology students across multiple higher education institutions in Uzbekistan. Experimental results yielded a mean score of 3.80 for the experimental group compared to 3.39 for the control group (chi-square empirical value: 14.55; critical threshold: 7.81), with an efficiency coefficient of 1.12. These findings demonstrate the FCDI system's validity and applicability as both a diagnostic and pedagogical instrument for enhancing phraseological instruction in EFL settings.

Keywords: phraseological competence, FCDI, cognitive approach, EFL teaching, diagnostic assessment, higher education, Uzbekistan

1. Introduction

The development of phraseological competence — the ability to accurately recognize, interpret, and contextually deploy fixed and semi-fixed multiword units — occupies an increasingly central position within contemporary second language acquisition (SLA) research (Wray, 2002; Moon, 1998; Nattinger & DeCarrico, 1992). Phraseological units, encompassing idioms, collocations, formulaic expressions, and proverbs, constitute a substantial portion of fluent native speaker discourse and present formidable challenges for EFL learners due to their semantic non-compositionality, cultural embeddedness, and pragmatic complexity (Boers & Lindstromberg, 2008; Cieślicka, 2006).

Within the Uzbekistan higher education system, despite regulatory frameworks emphasizing communicative competence development — including Presidential Decree PQ-5117 (2021), which mandates enhanced communicative and intercultural learning outcomes — the systematic pedagogical treatment of phraseological competence remains underdeveloped. Existing curricula tend to present phraseological units as incidental lexical items rather than integrating them into principled diagnostic and instructional frameworks. This gap is particularly consequential for philology students, whose academic and professional trajectories require a high degree of phraseological fluency.

The present article addresses this gap by introducing the Phraseological Competence Diagnostic Indicators (FCDI) system — a criterion-referenced diagnostic framework designed to operationalize phraseological competence across four theoretically motivated dimensions. The



FCDI system is grounded in cognitive linguistic theory, particularly conceptual metaphor theory (Lakoff & Johnson, 1980), prototype theory (Rosch, 1978), and frame semantics (Fillmore, 1985), and was developed and validated through empirical investigation involving 370 philology students at three major Uzbekistani universities: Uzbekistan State World Languages University (UZSWLU), Mirzo Ulugbek National University of Uzbekistan (Jizzakh branch), and Gulistan State University.

The article proceeds as follows: Section 2 reviews the theoretical underpinnings of the FCDI framework; Section 3 describes the research methodology and experimental design; Section 4 presents and discusses the empirical findings; and Section 5 offers conclusions and pedagogical implications.

2. Theoretical Framework

2.1 Phraseological Competence as a Multi-Dimensional Construct

Phraseological competence resists reduction to a single, unidimensional construct. Following Naciscione's (2010) discourse-functional perspective and Meunier and Granger's (2008) pedagogically oriented model, phraseological competence can be understood as encompassing at minimum three interrelated layers: a formal-structural layer (recognition and recall of the phraseological unit), a semantic-pragmatic layer (accurate interpretation and contextually appropriate use), and a socio-cultural layer (awareness of cultural connotations and stylistic register).

Cognitive linguistics adds a crucial fourth dimension — the conceptual or mental-representation layer — which concerns the degree to which learners have internalized the underlying metaphorical or metonymic mappings that generate the figurative meanings of phraseological units (Kövecses, 2002). For instance, understanding the English idiom 'to burn bridges' requires not merely rote memorization but activation of the SOURCE-PATH-GOAL schema (Lakoff, 1987) and the JOURNEY IS LIFE conceptual metaphor, together with cultural knowledge about the irreversibility of certain social actions.

2.2 Cognitive Principles Underlying the FCDI

The FCDI draws on four foundational cognitive principles:

Constructive Knowledge Processing (Bruner, 1966): Knowledge is most durably acquired through active construction rather than passive reception. In phraseological pedagogy, this implies learners should engage in semantic analysis, hypothesis formation, and contextual application rather than simple memorization.

Zone of Proximal Development (Vygotsky, 1978): Learners operate most effectively when tasks are calibrated to exceed current independent performance while remaining achievable with scaffolded support. FCDI diagnostic tasks are designed with this principle in mind, providing graduated challenge across the four indicator dimensions.

Conceptual Metaphor and Frame Semantics (Lakoff & Johnson, 1980; Fillmore, 1985): Phraseological units encode conceptual mappings between source and target domains. Diagnostic items should assess whether learners have internalized these mappings or rely solely on rote recall, as the former correlates with more robust and transferable phraseological knowledge.

Metacognitive Monitoring (Flavell, 1979): Effective language learners actively monitor their own comprehension and use. The FCDI incorporates a reflective self-assessment component, the Self-check — Context-check — Meaning-check (SCM) model, which is described in Section 3.



3. Methodology

3.1 Research Design and Participants

A quasi-experimental pre-test / post-test design was employed. The experimental group (n = 185) received phraseological instruction organized around the FCDI-aligned cognitive instructional model over one academic semester (18 weeks), while the control group (n = 185) followed the conventional curriculum. Participants were third-year philology students enrolled at UZSWLU, Gulistan State University, and Mirzo Ulugbek National University (Jizzakh branch). All participants provided written informed consent, and institutional ethical clearance was obtained from each participating institution. Total participant count across both groups: 370.

3.2 The FCDI System: Operational Definitions

The FCDI system operationalizes phraseological competence through four diagnostic indicators, each scored on a five-point rubric (1 = insufficient to 5 = exemplary):

(1) Semantic Accuracy (SA): The degree to which the learner correctly identifies or produces the figurative meaning of a phraseological unit, as distinct from its compositional/literal meaning. Items include meaning selection, paraphrase tasks, and translation equivalence tasks contrasting English and Uzbek phraseological units.

(2) Pragmatic Appropriateness (PA): The degree to which the learner selects and uses phraseological units in contextually, socially, and interactionally appropriate ways, attending to register, genre, and interlocutor-related constraints.

(3) Contextual Precision (CP): The degree to which the learner accurately identifies collocational and syntactic constraints on phraseological units — including restrictions on passivization, nominalization, and modification — and avoids productive errors resulting from L1 transfer or overgeneralization.

(4) Stylistic Sensitivity (SS): The degree to which the learner demonstrates awareness of the stylistic and affective loading of phraseological units, including formal/informal register distinctions, euphemistic or dysphemistic functions, and culturally marked connotations.

Indicator	Cognitive Basis	Sample Task Type	Scoring Focus
Semantic Accuracy	Conceptual Metaphor Theory	Meaning selection / paraphrase	Figurative vs. literal discrimination
Pragmatic Appropriateness	Speech Act Theory / Register Awareness	Contextual selection tasks	Socio-contextual appropriacy
Contextual Precision	Usage-Based Linguistics	Gap-fill / error correction	Collocational and syntactic accuracy
Stylistic Sensitivity	Sociolinguistics / Culturally Marked Meaning	Register sorting / cultural annotation	Cultural connotation awareness

Table 1. FCDI Indicator Framework: Cognitive Bases, Task Types, and Scoring Criteria

3.3 The SCM Metacognitive Monitoring Model

Integrated within the FCDI instructional protocol is the Self-check — Context-check — Meaning-check (SCM) model, a three-stage metacognitive monitoring sequence designed to support learners in regulating their comprehension and production of phraseological units:



Stage 1 — Self-check: The learner activates prior knowledge by attempting to recall or deduce the meaning and appropriate contexts for the target phraseological unit before consulting external resources.

Stage 2 — Context-check: The learner examines authentic contextual instances of the phraseological unit (drawn from a corpus, text, or dialogue) to verify, revise, or confirm their initial understanding.

Stage 3 — Meaning-check: The learner formulates a personal explanation of the phraseological unit's meaning and appropriate use, and evaluates whether their usage in a given communicative context is accurate and appropriate.

The SCM model is rooted in Flavell's (1979) metacognition framework and aligns with Vygotsky's (1978) internalization theory, positing that external regulatory processes (teacher-guided checking) are progressively internalized by the learner through repeated practice.

4. Results and Discussion

4.1 Quantitative Findings

Pre-test results indicated no statistically significant differences between the experimental and control groups on any of the four FCDI dimensions ($p > .05$), confirming baseline equivalence. Following the 18-week intervention, post-test data revealed significant improvements in the experimental group across all four indicators.

FCDI Indicator	Control Pre	Control Post	Exp. Pre	Exp. Post
Semantic Accuracy	2.81	3.30	2.79	3.76
Pragmatic Appropriateness	2.75	3.25	2.77	3.71
Contextual Precision	2.68	3.41	2.72	3.84
Stylistic Sensitivity	2.60	3.59	2.63	3.88
Overall Mean	2.71	3.39	2.73	3.80

Table 2. Pre-test and Post-test Mean Scores by FCDI Indicator (Scale: 1–5)

Chi-square statistical analysis confirmed a statistically significant difference between the experimental and control post-test distributions (χ^2 empirical = 14.55; χ^2 critical = 7.81, $df = 3$, $\alpha = 0.05$). The efficiency coefficient, calculated as the ratio of experimental to control post-test means, yielded a value of 1.12, indicating a 12% performance advantage for the FCDI-instructed group — a meaningful and practically significant outcome in the context of higher education language instruction.

Particularly noteworthy is the Stylistic Sensitivity dimension, which recorded the largest absolute gain in the experimental group ($\Delta = 1.25$) compared to the control group ($\Delta = 0.99$). This finding suggests that explicit cognitive instruction oriented toward cultural-semantic mappings is particularly effective in developing the culturally grounded layer of phraseological competence, which is typically the most resistant to conventional lexical instruction.

4.2 Qualitative Insights

Learner think-aloud protocols and reflective journal data collected from a purposive subsample ($n = 24$) of experimental group participants provided complementary qualitative evidence. Students reported that the SCM metacognitive monitoring model helped them shift from a translation-dependent to a context-dependent processing strategy. Representative comments included observations that 'thinking about why an idiom uses a particular image made it easier to



remember' and that 'checking the context before assuming I understood helped me avoid mistakes.' These learner perspectives are consistent with findings reported by Boers (2011) and Laufer and Waldman (2011) regarding the facilitative effects of etymological and form-focused awareness on formulaic language retention.

The cognitive-cultural map of English-Uzbek phraseological correspondences, developed as part of the FCDI instructional materials, proved particularly generative for learner engagement. By systematically comparing phraseological units organized around conceptual categories — JOURNEY, BODY, ANIMAL, WAR, and FOOD — students were able to identify both cross-linguistic conceptual universals and culture-specific divergences, deepening their metalinguistic and intercultural awareness simultaneously.

5. Conclusions and Pedagogical Implications

This study has introduced and empirically validated the FCDI system as a theoretically grounded and practically operationalizable framework for diagnosing and developing phraseological competence among EFL learners in Uzbekistani higher education. The following principal conclusions are drawn:

First, phraseological competence is most productively conceptualized as a multi-dimensional construct encompassing semantic, pragmatic, contextual, and stylistic dimensions. Monodimensional assessment instruments risk systematically overlooking one or more of these dimensions, leading to distorted learner profiles and misaligned instructional decisions.

Second, the FCDI system, when integrated with the SCM metacognitive monitoring model and a cognitive-cultural comparative framework, produces measurably superior learning outcomes compared to conventional phraseological instruction (overall mean gain: 1.07 vs. 0.68 for experimental and control groups, respectively; $\chi^2 = 14.55 >$ critical value 7.81).

Third, explicit attention to conceptual metaphor structures, cultural connotations, and cross-linguistic comparisons enhances both retention and productive deployment of phraseological units, particularly for the pragmatic and stylistic dimensions that are most challenging for EFL learners.

Pedagogical implications include: (a) the incorporation of the FCDI framework into formal curriculum planning and assessment rubric design for EFL philology programs; (b) the integration of comparative cognitive-cultural maps as instructional scaffolds for phraseological units; (c) the explicit teaching of the SCM metacognitive sequence as a learner strategy; and (d) the development of AI-assisted digital platforms that can provide individualized, real-time feedback on phraseological appropriacy — a direction already operationalized in the AI-assisted reflective learning platform idioms-academy.uz developed as part of the present research program.

Future research directions include: cross-institutional replication studies with larger and more diverse learner populations; adaptation of the FCDI framework for other language pairs and EFL contexts beyond Central Asia; longitudinal investigation of FCDI-based instruction effects on learner phraseological competence; and corpus-based expansion of the FCDI item bank to ensure broader coverage of phraseological unit types.

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