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DEGREES OF CONCEPTUAL-SEMANTIC EQUIVALENCE IN ENGLISH-UZBEK TERMINOLOGICAL PAIRS

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Abstract: This article examines conceptual-semantic equivalence as a graded relationship between source-language and target-language terms rather than as a binary relation of identity or non-identity. The study focuses on English-Uzbek terminological pairs and develops an operational model for distinguishing exact, near, partial, functional and zero equivalence. The model combines five criteria: coincidence of the core concept, overlap of intensional features, overlap of denotational extension, correspondence of systemic relations within the domain, and functional-pragmatic compatibility in professional communication. Recent international work in terminology shows that equivalent terms may coincide at the level of designation while diverging at the level of concept, institutional function or conceptual scope; this problem is especially visible in multilingual terminography and in domains shaped by national administrative, educational or legal systems. The proposed framework is tested on illustrative English-Uzbek pairs from linguistics, education, public administration and digital technology. The analysis demonstrates that a reliable equivalent cannot be selected solely by lexical similarity or dictionary matching: definitions, concept systems, domain restrictions and usage conditions must be compared. The article concludes that graded equivalence labels and short transfer comments should be incorporated into bilingual terminological resources to prevent false exactness and to improve translation consistency.

Keywords: terminology, conceptual equivalence, semantic equivalence, term pair, English-Uzbek terminology, partial equivalence, concept system, bilingual terminography.

INTRODUCTION

Equivalence is one of the central practical problems of bilingual terminology because professional communication requires not merely a linguistically acceptable translation but a target-language designation that refers to the same, or sufficiently comparable, specialized concept. Modern terminology work is concept-oriented: the relation among object, concept, definition and designation is treated as the basis for creating and evaluating terms. ISO 704:2022 explicitly places concepts and their relations at the centre of terminology work, which means that the comparison of term pairs must begin with conceptual analysis rather than with formal similarity between words. In translation-oriented terminology, however, complete coincidence is not always available. León-Araúz therefore treats degree of equivalence as a continuum extending from full to zero equivalence, while Kardos shows that multilingual termbases may contain exact, near, partial, functional or created translation equivalents depending on the conceptual system involved. These observations are important for English-Uzbek terminology because the two languages differ not only structurally but also in the historical sources of terminology, the degree of international borrowing, and the institutional organization of domains such as education, public administration and law.

The purpose of this article is to systematize the levels of conceptual-semantic equivalence in English-Uzbek terminological pairs and to propose criteria that can be applied in terminological analysis, translation and bilingual dictionary compilation. The study is qualitative and comparative. It does not claim corpus-frequency representativeness; instead, it uses an illustrative set of term pairs selected from several domains in order to show how equivalence changes when conceptual features, extension, systemic position and communicative function are compared. The relevance of such an approach is supported by recent research on English-Uzbek terminology. Abdullaeva emphasizes the practical difficulty of translating technical terms, Norova and Narziyeva note the specific regularity of terminological systems, Askarova demonstrates that even structurally comparable English-Uzbek linguistic terms may display different degrees of semantic correspondence, and Ergashev (2026) identifies equivalence gaps as a recurring problem in bilingual terminological lexicography.

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Consequently, a graded model is more informative than the traditional practice of presenting one source term and one target term as if they were automatically interchangeable.

Conceptual-semantic equivalence should be understood as the degree to which two terms in different languages designate concepts that coincide in essential characteristics, extension and domain function. The semantic component concerns the content conveyed by the designation, whereas the conceptual component concerns the structured unit of specialized knowledge to which the term refers. These components are interconnected but not identical. Two terms may be close in dictionary meaning while belonging to different conceptual systems, and they may therefore be poor professional equivalents. Liu, analysing partial equivalence in bilingual dictionaries, shows that cross-linguistic correspondences frequently differ in signification, syntagmatic relations and associative relations. De Deyne, Brysbaert and Elgort similarly point out that cross-language semantic non-equivalence may arise because words are defined at different levels of abstraction, have different senses or carry divergent connotations. In specialized discourse the problem is even more precise: a term has a defined place in a concept system, and this position determines its relations with broader, narrower and coordinate concepts. Thus, the pair cannot be evaluated only by asking whether the two designations 'mean approximately the same thing'; it is necessary to ask whether they occupy comparable conceptual positions in the relevant field.

A useful distinction must also be made between terminological equivalence and translation acceptability. A translator may choose a target expression that performs the communicative task of the source text even when the target-language concept is not identical. Such a solution may be functionally appropriate but terminologically non-exact. Li describes conceptual deviation as a measurable feature of terminology translation, while Kardos distinguishes cases where a functional equivalent or a created translation equivalent is preferable to a falsely exact target term. This distinction is crucial in institutional domains. For example, an English term naming a role, educational unit or administrative procedure may resemble an Uzbek designation and may even be translated consistently by that designation, yet the underlying legal authority, organizational scope or institutional function may differ. In this situation the translation is operationally useful but conceptually only partial or functional. A bilingual terminological resource should therefore record the relation instead of concealing it under a simple equals sign.

For practical classification, five diagnostic criteria can be applied to each term pair. The first is core-concept coincidence: whether both terms refer to the same central specialized notion. The second is intensional overlap: whether the essential definitional features coincide. The third is extensional overlap: whether the range of objects or situations covered by the two terms is the same. The fourth is systemic correspondence: whether the concepts hold comparable hierarchical and associative relations inside their respective domain systems. The fifth is functional-pragmatic compatibility: whether specialists use the two terms in comparable communicative situations and with comparable normative status. Each criterion may be evaluated as high, moderate or low. The combination of these indicators allows five degrees to be distinguished. Exact equivalence requires substantial identity across all five dimensions. Near equivalence preserves the same core concept but permits minor differences in scope or usage. Partial equivalence exists where the concepts overlap but one is broader, narrower or differently structured. Functional or translation equivalence is used when the target expression fulfills a similar communicative role without naming an identical established concept. Zero equivalence occurs when no lexicalized target-language designation corresponds to the source concept and explanation, borrowing or a newly created term is required. This scale follows the full-to-zero continuum described in contemporary terminology research while adapting it to English-Uzbek comparison.

Table 1. Operational levels of conceptual-semantic equivalence in English-Uzbek term pairs

Level	Conceptual-semantic relation	Diagnostic profile	Illustrative English-Uzbek pair

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Level	Conceptual-semantic relation	Diagnostic profile	Illustrative English-Uzbek pair
1. Exact	Same concept and essentially the same scope	High overlap in definition, extension, system relations and professional use	phoneme - fonema; artificial intelligence - sun'iy intellekt
2. Near	Same core concept with minor domain or usage differences	Core features coincide; one or two peripheral features differ	higher education institution - oliy ta'lim muassasasi
3. Partial	Concepts overlap but are not coextensive	Broader/narrower scope, different feature structure or system position	curriculum - o'quv dasturi; faculty - fakultet
4. Functional / translation	Different established concepts but comparable communicative function, or a created target designation	Function is similar, conceptual identity is limited; explanatory note is desirable	public administration - davlat boshqaruvi in institution-specific contexts
5. Zero	No established target-language concept or lexicalized designation	Core concept lacks a stable target counterpart; borrowing, description or term creation is needed	newly emerging domain-specific terms before standardization

The examples in Table 1 show why morphological resemblance and borrowing cannot by themselves determine equivalence. The pair phoneme - fonema represents a comparatively stable case: the Uzbek term is an internationally recognizable borrowing and the linguistic concept is defined through essentially the same oppositional and functional relations in both terminological traditions. Artificial intelligence - sun'iy intellekt is likewise a strong candidate for exact equivalence when used as the general technical concept. By contrast, curriculum - o'quv dasturi requires more caution. In English-language educational discourse, curriculum can include aims, content, learning experiences, sequencing, assessment principles and the wider organization of a programme, whereas o'quv dasturi may be used more narrowly for an official programme or syllabus-like document. In many texts the pair is an acceptable translation, but from a conceptual perspective it may be only partial unless the definitions in the relevant institutional context are shown to coincide. The same applies to faculty - fakultet. In Uzbek higher education, fakultet normally denotes a formal organizational unit, while English faculty can denote an academic division in some systems and the teaching staff collectively in others. A bilingual dictionary that gives only fakultet as an undifferentiated equivalent therefore risks merging distinct English concepts.

Near equivalence is especially important because it describes a large group of term pairs that are practically interchangeable in ordinary professional translation but not completely identical under detailed conceptual analysis. Higher education institution - oliy ta'lim muassasasi normally refers to the same general category of university-level educational organization, but national legislation can define the category, licensing status or included institution types differently. These differences do not always block translation, yet they become significant in legal, comparative or policy texts. The translator should therefore distinguish a general conceptual correspondence from a jurisdiction-bound definition. Such caution agrees with Kardos's analysis of universal and country-specific concepts and with ISO 704:2022, which requires the relations between concepts and designations to be represented explicitly. It also explains why terminology databases need domain and context fields: equivalence is often conditional on the conceptual system chosen as the reference.

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Partial equivalence can be directional and asymmetric. If an English term covers a broader conceptual field than its Uzbek counterpart, the target term may be usable in some contexts but not others. Conversely, an Uzbek term may encode a narrower institutional or cultural category for which English provides only a broader designation. This asymmetry is not a defect of either language; it is a consequence of different conceptualizations and different histories of knowledge organization. Dadaboyev describes the lexical-semantic development of Uzbek terminology as a system influenced by internal word formation and by borrowed layers, while Madvaliev emphasizes the close relation between terminology and lexicographic normalization. Recent English-Uzbek studies show the same tendency at the level of translation practice. Askarova (2026), for example, identifies full, partial and transformed correspondences in two-component linguistic terms, demonstrating that structural similarity does not guarantee semantic identity. Ergashev likewise treats equivalence gaps and inconsistent dictionary presentation as practical problems for domain-specific lexicography. These findings support a model in which a target equivalent is assigned a degree rather than treated as absolutely correct or incorrect outside context.

The fourth level, functional or translation equivalence, is necessary when a translator must bridge two non-identical systems. Public administration - davlat boshqaruvi can illustrate the issue. In many general contexts the Uzbek expression communicates the intended idea successfully, but English public administration may include public-service management, local government, administrative practice and the academic discipline studying these processes, while davlat boshqaruvi can foreground state governance and executive administration. The pair may therefore be exact in one context, near in another and only functional in a third. The level is determined not by the surface forms but by the source definition and the target institutional environment. This context-sensitivity also explains why emerging technological terms may temporarily fall into zero equivalence. Before a new concept is standardized in Uzbek, translators may use transliteration, calquing, descriptive phrases or competing variants. At that stage a stable conceptual counterpart has not yet been lexicalized. Once professional usage and standardization converge, the same item can move upward on the equivalence scale. Equivalence is therefore partly dynamic: terminological systems change as concepts become institutionalized and designations become conventional.

For bilingual terminography, the practical consequence is that each entry should separate the concept level from the term level. A two-column glossary can conceal conceptual differences because it visually suggests one-to-one correspondence. A concept-oriented entry should instead include a definition, domain label, source, usage status, possible broader or narrower concepts, and an equivalence marker. Repar et al. show that bilingual term alignment can achieve high precision computationally, but automatic alignment still identifies candidate correspondences rather than replacing conceptual validation. Human terminological analysis is required to verify whether aligned strings refer to the same concept. The same principle applies to machine translation and AI-assisted terminology extraction: distributional similarity can locate probable pairs, but concept identity must be established through definitions, expert sources and domain relations. A short transfer comment such as ‘broader than the English term’, ‘used as a functional equivalent in Uzbek administrative texts’, or ‘no standardized Uzbek equivalent found’ can prevent later translators from treating a provisional solution as an exact conceptual match.

An operational workflow for English-Uzbek term pairs can therefore be formulated as follows. First, identify the domain and extract a reliable definition for the source term. Second, collect candidate Uzbek equivalents from specialized dictionaries, parallel texts, standards and professional usage. Third, write or retrieve the definition of each candidate without translating the source definition mechanically. Fourth, compare essential characteristics, denotational scope and concept-system relations. Fifth, check the professional function and normative status of the candidate in Uzbek. Finally, assign an equivalence degree and record any directionality or contextual restriction. This procedure prevents a common error in terminology work: selecting a target expression because it is formally similar, frequent or easy to understand even though it represents a different concept. It also supports consistency across translation

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projects because later users can see why a particular equivalent was accepted and under which conditions it remains valid.

CONCLUSION

Conceptual-semantic equivalence in terminological pairs is a graded and context-dependent relation. Exact equivalence is possible when the source and target terms designate the same concept, share essential definitional features, cover the same extension, occupy comparable positions in their concept systems and function similarly in professional discourse. Near and partial equivalence arise when the core concept is shared but peripheral features, institutional scope or systemic relations differ. Functional or translation equivalence becomes necessary when communication requires a usable target designation despite conceptual non-identity, while zero equivalence describes the absence of a stable lexicalized target counterpart. These distinctions are especially important for English-Uzbek terminology because international concepts coexist with nationally specific educational, administrative and cultural systems and because new terms continue to enter Uzbek through borrowing, calquing and internal term formation.

The proposed five-level model offers a practical basis for translation analysis and bilingual terminography. Its principal methodological requirement is that a term pair must be evaluated through definitions and concept systems rather than through lexical resemblance alone. For terminological dictionaries and electronic termbases, equivalence labels should be accompanied by domain information and, where necessary, a brief transfer comment explaining directionality, broader/narrower scope or institutional differences. Such representation does not complicate terminology unnecessarily; on the contrary, it makes the resource more reliable by preventing false exactness. Future corpus-based research may apply the same criteria to larger English-Uzbek datasets and quantify the distribution of equivalence levels across individual domains, but the conceptual validation of each pair should remain the decisive stage of analysis.

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