International Journal of Interdisciplinary Telecommunications and Networking
Volume 18 • Issue 1 • January-December 2026

CLVA-Based Framework for College English Translation Teaching Quality Evaluation With 2-Tuple Linguistic Neutrosophic Information

Yunying He
https://orcid.org/0009-0002-8305-302X
School of Foreign Languages, Hezhou University, China
Received: April 14th, 2025 | **Accepted:** December 11th, 2025

ABSTRACT

College English teaching is an important component of higher education. The quality of English teaching not only affects students' interest and proficiency in learning English but also influences the cultivation of English professionals in the country. As English translation teaching is one of the core aspects of English education, colleges and universities must take effective measures to improve its quality. The college English translation teaching quality evaluation is multiple attribute group decision making (MAGDM). The 2-tuple linguistic neutrosophic sets (2TLNSs) is an appropriate form to express the indeterminate information in the college English translation teaching quality evaluation. In this paper, the 2-tuple linguistic neutrosophic numbers CLVA (2TLNN-CLVA) is built based on close value (CLVA) method and applies it to evaluate the college English translation teaching quality. Finally, a numerical example for evaluating the college English translation teaching quality was given and some decision comparisons are conducted to illustrate the advantages of 2TLNN-CLVA method.

KEYWORDS

Multiple Attribute Group Decision Making (MAGDM) Problems, 2-Tuple Linguistic Neutrosophic Sets (2TLNSs), CLVA Method, College English Translation Teaching Quality

INTRODUCTION

Against the backdrop of economic globalization, there is a growing demand across industries for versatile English talents, which in turn places higher requirements on translation education for both English and non-English majors in universities. English translation teaching enhances students' comprehensive language proficiency by integrating the four core skills of listening, speaking, reading, and writing (Lu, 2025; S. Xu, 2025; J. Zhang, 2025). Currently, however, translation teaching in college English is often neglected, and students lack sufficient practical experience. This article explores strategies to improve the teaching of English translation, aiming to enhance students' translation skills and better align with the needs of cultivating English talents in the new era.

A major challenge is the limited number of class hours allocated to college English. Within these constraints, teaching tends to prioritize reading, with little attention paid to translation theory or techniques (Kong & He, 2025; Li et al., 2025; J. Liu, 2025). There are no dedicated translation

DOI: 10.4018/IJITN.397042

textbooks for non-English majors, nor are there compulsory translation courses. Although the inclusion of Chinese-to-English translation in the College English Test (CET)-4 exam has had some positive impact, the overall effectiveness of translation instruction remains limited. For instance, at the author's institution, translation tasks are included in final exams (Feng & Wang, 2025; Zou, 2024). Yet, an analysis of student performance reveals frequent grammatical errors and weak foundational knowledge, leading to low accuracy. Many students merely rearrange vocabulary without producing coherent or logically sound translations—a clear indication of insufficient training in translation theory and strategies. This situation stems from excessive reliance on syllabus guidelines and rigid curriculum structures, which prevent the systematic and holistic integration of translation into English teaching (Xue & Wang, 2024; Zhan, 2024; H. Zhou, 2024).

As a general education course, college English often suffers from low student motivation, driven largely by the need to earn credits or pass the CET-4 and CET-6 exams. This student attitude influences teaching approaches, pushing instruction toward test preparation. Some universities emphasize CET pass rates, leading teachers to focus on exam-oriented exercises in daily instruction. In such an environment, translation is often undervalued—sometimes viewed as relevant only to English majors and only occasionally touched upon in class. In short, the importance of translation is widely overlooked by both instructors and learners (Wei, 2024; Xiao & Li, 2024).

Yet, translation teaching plays a vital role in improving students' comprehensive English skills and fostering cross-cultural understanding and communication. College English aims to develop listening, speaking, reading, writing, and translation abilities—all of which are closely intertwined. While reading has long been the focus of instruction, translation competence directly affects text comprehension: Accurate understanding depends on accurate translation (Ma, 2024; Qiu, 2024; X. Wang, 2024). Similarly, listening comprehension requires processing prompts and options, and writing involves applying translation skills at the word, sentence, and discourse levels. Thus, translation is inseparable from the other four language skills. Through translation, students engage deeply with language, process meaning, and improve overall application skills (Lai, 2024; F. Liu, 2024; Lv, 2024). Moreover, translation is not merely a process of substituting words between languages. Rather, Chinese-to-English translation constitutes a complex form of cross-cultural communication. Therefore, effective translation teaching is essential for enhancing comprehensive English proficiency and achieving meaningful intercultural exchange.

Multi-attribute group decision-making (MAGDM) represents a significant challenge frequently encountered in management science and operations research (Guo et al., 2026; Ning et al., 2025; Qin et al., 2026; Yang & Wang, 2026). This framework addresses situations where a collective of decision-makers must evaluate and select from a set of alternatives, with each option described by multiple, often conflicting, criteria (Ning et al., 2025; Y. J. Y. Zhang et al., 2024). The inherent complexity of MAGDM stems from the need to synthesize diverse expert opinions, reconcile competing objectives, and process information that is often imprecise or qualitative in nature(J. Wang et al., 2024; Z. Y. Wang et al., 2023; X. R. Xu et al., 2025). A typical MAGDM process begins by defining the problem structure: identifying the alternatives, establishing the evaluation attributes, and forming the group of experts (Cao et al., 2026; Zhong et al., 2025; Y. J. Zhou et al., 2025; Zulqarnain et al., 2025). Each member of the group then provides their assessment, which can be expressed using numerical scores, linguistic terms like "good" or "poor," or more advanced forms like fuzzy numbers to capture uncertainty (J. Zhang et al., 2025; Zhang & Zhu, 2025; Y. P. Zhang et al., 2025; Zhao et al., 2025). The core of the methodology lies in aggregating these individual judgments into a collective evaluation for each alternative. This phase is crucial and often involves applying specific techniques to determine the relative importance, or weights, of both the decision-makers and the various attributes. To navigate the complexities of differing opinions and vague data, several sophisticated computational models have been developed (Z. Y. Wang et al., 2023; H. Y. Zhang et al., 2023; N. Zhang et al., 2023). Techniques such as the TOPSIS (Chen, 2000; Y.-J. Lai et al., 1994), VIKOR (Opricovic & Tzeng, 2004, 2007), and aggregation operators are commonly employed to rank the