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Investigating the Role of Instructional Strategies in Shaping College English Learning Outcomes under the Triangular OffConorm from a Practical Perspective

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Abstract: The effectiveness of college English language instruction at the college level is significantly influenced by the choice and implementation of instructional strategies. This study explores how various strategies affect learning outcomes by evaluating a set of pedagogical criteria across diverse instructional alternatives. Utilizing a multi-criteria evaluation approach, this research highlights the interplay between teaching methods, student engagement, and language acquisition. We use the Triangular OffConorm to combine the decision matrix values. We use the MAIRCA method to rank the alternatives. We use eight criteria and 14 alternatives to build numerical examples. The results contribute to developing informed teaching practices that optimize college English language learning in higher education.

Keywords: Triangular OffConorm; English Learning Outcomes; College English Learning Outcomes; Education.

1. Introduction

English has emerged as a crucial language for scholarly and professional discourse in the rapidly changing world of global communication. To better prepare students for opportunities and standards around the world, colleges and universities are always looking for methods to improve the results of their English instruction. A key component of this endeavor is the use of instructional tactics. The way that material is presented has a big impact on how well students learn and retain language skills, whether it is through traditional lectures or more contemporary, tech-assisted approaches[1], [2]. Over time, research has shifted its focus to instructional efficacy rather than just evaluating material and curriculum. It is now commonly acknowledged that instructional tactics have a direct impact on students' performance, motivation, and comprehension. Since learning English comprises a combination of speaking, listening, reading,

and writing skills, evaluating instructional methodologies calls for a multifaceted approach. Depending on the approach used, each of these dimensions may be affected differently[3], [4]. The selection of the best teaching methods is further complicated by the diversity of students in terms of their cultural backgrounds, learning preferences, and skill levels. A thorough evaluation framework is therefore necessary[5], [6]. To evaluate the effectiveness of different teaching strategies using a set of carefully chosen pedagogical criteria, this study presents a strong assessment matrix. Its main goal is to determine which approaches yield the best results in a variety of English language learning domains[7], [8]. Teachers and institutions can make data-driven decisions to improve their teaching methods by using this lens to analyze instructional strategies. This improves the educational process and advances the more general objective of superior language instruction[9], [10]. Entity linkages in the Role of Instructional Strategies in Shaping English Learning Outcomes are intricate and change as the environment does. It is essential to comprehend these relationships completely. Impacts on the economic, social, and environmental levels must also be considered, as each poses different requirements and difficulties. Multiple factors must be taken into consideration due to the difficulty of evaluating the Role of Instructional Strategies in Shaping English Learning Outcomes[11], [12].

Role of Instructional Strategies in Shaping English Learning Outcomes assessment thus turns into a multi-criteria decision-making (MCDM) dilemma[13], [14]. For evaluation to be effective, a system of evaluation criteria covering several levels and aspects must be established. This system consists of several indicators that each indicate distinct facets of the assessment item and how they relate to one another[15], [16]. To improve the scientific validity of evaluation outcomes, it explores the requirements and constraints of the Role of Instructional Strategies in Shaping English Learning Outcomes while considering its intrinsic complexity and dynamics[17], [18].

In conclusion, this study's innovations and benefits are as follows: To assess the Role of Instructional Strategies in Shaping English Learning Outcomes, the Triangular OffConorm is first utilized to assessment data and then expanded to the average technique.

- Additionally, Triangular OffConorm can more fully and efficiently describe interval information that is unclear and ambiguous when it comes to decision-making.
- Second, the suggested Triangular OffConorm optimizes the aggregation effect of interval information by being the first to concurrently consider the weights of objective and subjective criteria as well as the impact of weight order.
- Lastly, the average method is used to compute the criteria weights based on the opinions of experts and decision makers.
- The MAIRCA method is used to rank the alternatives based on the eight criteria and 14 alternatives.
- The sensitivity analysis is applied to show stability of the ranks of alternatives.

This is how the remainder of the paper is structured. The proposed approach of this study to compute the criteria weights and ranking the alternatives is introduced in Section 2. The results

of the proposed approach are presented in Section 3. A case analysis is presented in Section 4. A Section 5 concludes with a conclusion.

2. Triangular OffConorm

This part shows the definitions of Triangular OffConorm to show combination of different decision matrix[19].

$T_{offconorm}: [\beta,\gamma] \times [\beta,\gamma] \to [\beta,\gamma] \beta < 0 < 1 < \gamma$ (1)

$(F,G) \in [\beta,\gamma] \times [\beta,\gamma]$ (2)

$T_{offconorm}(F,G) = T_{offconorm}(G,F)$ commutativity (3)

$T_{offconorm}\left(F,\left(T_{offconorm}(G,H)\right)\right) = T_{offconorm}\left(T_{offconorm}(F,G),H\right)$ associativity (4)

$if\ G \geq H, then\ T_{offconorm}(F,G) \leq T_{offconorm}(F,H)$ monotonicity (5)

$T_{offconorm}(F,\beta) = F$, then neutral element is the smallest element β (6)

$T_{offconorm}(F,G) = \max(F,G)$ (7)

We show the steps of the MAIRCA to rank the alternatives.

Create the decision matrix between the criteria and alternatives. We combine the decision matrix using the $T_{offconorm}$.

Compute the criteria weights by the average method.

Compute the components $U_{p_{ij}}$ of the theoretical rating matrix

$U_{p_{ij}} = y_{ij} * w_j$ (8)

Determine the components of real rating matrix for positive and negative criteria.

$A_{ij} = U_{p_{ij}}\left(\frac{y_{ij}-\min y_i}{\max y_i-\min y_i}\right)$ (9)

$A_{ij} = U_{p_{ij}}\left(\frac{y_{ij}-\max y_i}{\min y_i-\max y_i}\right)$ (10)

Determine the total gap matrix

$S_{ij} = U_{p_{ij}} - A_{ij}$ (11)

Determine the final score of each alternative.

$Q_i = \sum_{i=1}^{m} S_{ij}$ (12)

Rank the alternatives.

3. Results

We show the results of the proposed approach by introducing eight criteria and 14 alternatives of this study.

- Engagement Level (C1) – Measures how well the strategy maintains student interest.
- Language Skill Integration (C2) – Assesses how effectively the strategy combines reading, writing, listening, and speaking.
- Feedback Mechanism (C3) – Evaluates the clarity and frequency of student feedback.
- Adaptability to Proficiency (C4) – Considers the method's flexibility for different learner levels.
- Cultural Relevance (C5) – Judges how well the strategy incorporates culturally appropriate materials.
- Technology Integration (C6) – Reviews the use of digital tools to enhance learning.
- Assessment Alignment (C7) – Checks if the evaluation methods align with instructional goals.
- Autonomous Learning Promotion (C8) – Looks at how the strategy fosters independent study habits.
- Collaborative Opportunities (C9) – Examines the extent of group interaction or peer collaboration encouraged.

- Lecture-Based Method (A1)
- Communicative Language Teaching (A2)
- Task-Based Learning (A3)
- Blended Learning (A4)
- Project-Based Learning (A5)
- Flipped Classroom (A6)
- Grammar-Translation Method (A7)
- Audio-Lingual Method (A8)
- Problem-Based Learning (A9)
- Interactive Multimedia Approach (A10)
- Storytelling and Narratives (A11)
- Role-Play and Simulation (A12)
- Mobile-Assisted Language Learning (A13)
- Peer Tutoring and Mentoring (A14)

Three experts and decision makers created the decision matrix between the criteria and alternatives as shown in Table 1. We use the $T_{offconorm}$ to combine the decision matrix. Then we compute the criteria weights.

The weights of criteria represent the relative importance or influence of each criterion in a MCDM context such as educational evaluation or instructional effectiveness analysis:

1. C1 (0.1233) – This criterion holds a moderately balanced importance in the overall evaluation, indicating it plays a consistent role but is not dominant compared to others.
2. C2 (0.1260) – Slightly higher than U1, this criterion carries a slightly greater weight, suggesting it is considered a bit more critical in influencing the final outcomes.
3. C3 (0.1235) – Nearly identical in value to U1, this criterion also reflects stable importance, reinforcing consistency across the framework.
4. C4 (0.1226) – Marginally lower than others, this weight indicates a slightly reduced emphasis, though it remains an integral part of the assessment.
5. C5 (0.1277) – One of the more influential criteria in the group, U5 is likely considered more decisive in the evaluation process, reflecting its high relevance.
6. C6 (0.1243) – Above average in value, U6 plays a moderately significant role in shaping evaluation decisions.
7. C7 (0.1235) – Mirroring U3, this weight again reflects consistent judgment, possibly indicating the use of equally significant metrics for U3 and U7.
8. C8 (0.1290) – The highest weight among all, U8 stands out as the most influential criterion, likely highlighting its dominant role in the decision-making or evaluation model.

The weights are balanced, with minor variations, suggesting that all eight criteria are important in the evaluation process, though C8 and C5 slightly outweigh the others. This distribution supports a comprehensive and equitable assessment framework where no single factor overwhelmingly dictates outcomes.

Table 1. The decision matrix.

	C_1	C_2	C_3	C_4	C_5	C_6	C_7	C_8
A_1	[-0.1,1.1]	[-0.2,0.1.2]	[-0.3,1.3]	[-0.4,1.4]	[-0.5,1.5]	[-0.6,1.6]	[-0.7,1.7]	[-0.3,1.3]
A_2	[-0.1,1.1]	[-0.7,1.7]	[-0.6,1.6]	[-0.5,1.5]	[-0.4,1.4]	[-0.3,1.3]	[-0.1,1.1]	[-0.4,1.4]
A_3	[-0.2,0.1.2]	[-0.3,1.3]	[-0.4,1.4]	[-0.5,1.5]	[-0.6,1.6]	[-0.2,0.1.2]	[-0.2,0.1.2]	[-0.5,1.5]
A_4	[-0.4,1.4]	[-0.3,1.3]	[-0.2,0.1.2]	[-0.1,1.1]	[-0.7,1.7]	[-0.1,1.1]	[-0.3,1.3]	[-0.6,1.6]
A_5	[-0.5,1.5]	[-0.4,1.4]	[-0.3,1.3]	[-0.2,0.1.2]	[-0.1,1.1]	[-0.7,1.7]	[-0.4,1.4]	[-0.7,1.7]
A_6	[-0.5,1.5]	[-0.5,1.5]	[-0.4,1.4]	[-0.5,1.5]	[-0.7,1.7]	[-0.6,1.6]	[-0.5,1.5]	[-0.6,1.6]
A_7	[-0.6,1.6]	[-0.6,1.6]	[-0.3,1.3]	[-0.6,1.6]	[-0.6,1.6]	[-0.5,1.5]	[-0.6,1.6]	[-0.5,1.5]
A_8	[-0.6,1.6]	[-0.7,1.7]	[-0.2,0.1.2]	[-0.7,1.7]	[-0.5,1.5]	[-0.4,1.4]	[-0.7,1.7]	[-0.2,0.1.2]
A_9	[-0.7,1.7]	[-0.1,1.1]	[-0.1,1.1]	[-0.1,1.1]	[-0.4,1.4]	[-0.3,1.3]	[-0.1,1.1]	[-0.7,1.7]
A_{10}	[-0.7,1.7]	[-0.2,0.1.2]	[-0.7,1.7]	[-0.2,0.1.2]	[-0.3,1.3]	[-0.2,0.1.2]	[-0.2,0.1.2]	[-0.3,1.3]
A_{11}	[-0.2,0.1.2]	[-0.2,0.1.2]	[-0.2,0.1.2]	[-0.5,1.5]	[-0.3,1.3]	[-0.2,0.1.2]	[-0.5,1.5]	[-0.5,1.5]
A_{12}	[-0.1,1.1]	[-0.1,1.1]	[-0.1,1.1]	[-0.1,1.1]	[-0.2,0.1.2]	[-0.1,1.1]	[-0.2,0.1.2]	[-0.1,1.1]
A_{13}	[-0.7,1.7]	[-0.7,1.7]	[-0.7,1.7]	[-0.2,0.1.2]	[-0.1,1.1]	[-0.7,1.7]	[-0.1,1.1]	[-0.2,0.1.2]
A_{14}	[-0.1,1.1]	[-0.3,1.3]	[-0.4,1.4]	[-0.5,1.5]	[-0.4,1.4]	[-0.5,1.5]	[-0.2,0.1.2]	[-0.7,1.7]
	C_1	C_2	C_3	C_4	C_5	C_6	C_7	C_8
A_1	[-0.4,1.4]	[-0.2,0.1.2]	[-0.3,1.3]	[-0.4,1.4]	[-0.5,1.5]	[-0.6,1.6]	[-0.7,1.7]	[-0.3,1.3]
A_2	[-0.3,1.3]	[-0.7,1.7]	[-0.6,1.6]	[-0.4,1.4]	[-0.4,1.4]	[-0.3,1.3]	[-0.4,1.4]	[-0.4,1.4]
A_3	[-0.2,0.1.2]	[-0.3,1.3]	[-0.4,1.4]	[-0.3,1.3]	[-0.4,1.4]	[-0.2,0.1.2]	[-0.3,1.3]	[-0.5,1.5]
A_4	[-0.1,1.1]	[-0.3,1.3]	[-0.2,0.1.2]	[-0.2,0.1.2]	[-0.3,1.3]	[-0.1,1.1]	[-0.2,0.1.2]	[-0.6,1.6]
A_5	[-0.7,1.7]	[-0.4,1.4]	[-0.3,1.3]	[-0.1,1.1]	[-0.2,0.1.2]	[-0.7,1.7]	[-0.1,1.1]	[-0.5,1.5]

A_6	[-0.4,1.4]	[-0.4,1.4]	[-0.4,1.4]	[-0.7,1.7]	[-0.1,1.1]	[-0.4,1.4]	[-0.7,1.7]	[-0.6,1.6]
A_7	[-0.3,1.3]	[-0.3,1.3]	[-0.3,1.3]	[-0.6,1.6]	[-0.4,1.4]	[-0.3,1.3]	[-0.6,1.6]	[-0.5,1.5]
A_8	[-0.1,1.1]	[-0.2,0.1.2]	[-0.3,1.3]	[-0.4,1.4]	[-0.5,1.5]	[-0.6,1.6]	[-0.7,1.7]	[-0.1,1.1]
A_9	[-0.5,1.5]	[-0.4,1.4]	[-0.6,1.6]	[-0.6,1.6]	[-0.7,1.7]	[-0.1,1.1]	[-0.1,1.1]	[-0.2,0.1.2]
A_{10}	[-0.4,1.4]	[-0.6,1.6]	[-0.6,1.6]	[-0.1,1.1]	[-0.2,0.1.2]	[-0.3,1.3]	[-0.4,1.4]	[-0.3,1.3]
A_{11}	[-0.3,1.3]	[-0.5,1.5]	[-0.4,1.4]	[-0.5,1.5]	[-0.6,1.6]	[-0.5,1.5]	[-0.4,1.4]	[-0.4,1.4]
A_{12}	[-0.2,0.1.2]	[-0.3,1.3]	[-0.2,0.1.2]	[-0.1,1.1]	[-0.7,1.7]	[-0.6,1.6]	[-0.5,1.5]	[-0.5,1.5]
A_{13}	[-0.4,1.4]	[-0.3,1.3]	[-0.2,0.1.2]	[-0.1,1.1]	[-0.7,1.7]	[-0.6,1.6]	[-0.5,1.5]	[-0.5,1.5]
A_{14}	[-0.7,1.7]	[-0.6,1.6]	[-0.5,1.5]	[-0.4,1.4]	[-0.3,1.3]	[-0.2,0.1.2]	[-0.1,1.1]	[-0.6,1.6]
	C_1	C_2	C_3	C_4	C_5	C_6	C_7	C_8
A_1	[-0.1,1.1]	[-0.2,0.1.2]	[-0.3,1.3]	[-0.4,1.4]	[-0.5,1.5]	[-0.6,1.6]	[-0.7,1.7]	[-0.3,1.3]
A_2	[-0.7,1.7]	[-0.7,1.7]	[-0.6,1.6]	[-0.5,1.5]	[-0.4,1.4]	[-0.3,1.3]	[-0.1,1.1]	[-0.4,1.4]
A_3	[-0.6,1.6]	[-0.1,1.1]	[-0.4,1.4]	[-0.5,1.5]	[-0.6,1.6]	[-0.2,0.1.2]	[-0.7,1.7]	[-0.5,1.5]
A_4	[-0.5,1.5]	[-0.7,1.7]	[-0.1,1.1]	[-0.1,1.1]	[-0.1,1.1]	[-0.1,1.1]	[-0.6,1.6]	[-0.6,1.6]
A_5	[-0.4,1.4]	[-0.6,1.6]	[-0.7,1.7]	[-0.1,1.1]	[-0.7,1.7]	[-0.1,1.1]	[-0.5,1.5]	[-0.7,1.7]
A_6	[-0.3,1.3]	[-0.5,1.5]	[-0.6,1.6]	[-0.7,1.7]	[-0.6,1.6]	[-0.7,1.7]	[-0.4,1.4]	[-0.6,1.6]
A_7	[-0.2,0.1.2]	[-0.4,1.4]	[-0.5,1.5]	[-0.6,1.6]	[-0.5,1.5]	[-0.6,1.6]	[-0.3,1.3]	[-0.5,1.5]
A_8	[-0.6,1.6]	[-0.7,1.7]	[-0.1,1.1]	[-0.2,0.1.2]	[-0.3,1.3]	[-0.4,1.4]	[-0.5,1.5]	[-0.6,1.6]
A_9	[-0.1,1.1]	[-0.7,1.7]	[-0.6,1.6]	[-0.5,1.5]	[-0.4,1.4]	[-0.3,1.3]	[-0.2,0.1.2]	[-0.1,1.1]
A_{10}	[-0.2,0.1.2]	[-0.1,1.1]	[-0.7,1.7]	[-0.6,1.6]	[-0.5,1.5]	[-0.4,1.4]	[-0.3,1.3]	[-0.2,0.1.2]
A_{11}	[-0.3,1.3]	[-0.3,1.3]	[-0.4,1.4]	[-0.5,1.5]	[-0.6,1.6]	[-0.7,1.7]	[-0.1,1.1]	[-0.1,1.1]
A_{12}	[-0.4,1.4]	[-0.7,1.7]	[-0.6,1.6]	[-0.5,1.5]	[-0.4,1.4]	[-0.3,1.3]	[-0.2,0.1.2]	[-0.7,1.7]
A_{13}	[-0.5,1.5]	[-0.1,1.1]	[-0.2,0.1.2]	[-0.3,1.3]	[-0.4,1.4]	[-0.5,1.5]	[-0.6,1.6]	[-0.6,1.6]
A_{14}	[-0.6,1.6]	[-0.7,1.7]	[-0.1,1.1]	[-0.2,0.1.2]	[-0.3,1.3]	[-0.4,1.4]	[-0.4,1.4]	[-0.5,1.5]

Eq. (8) is used to compute the components $U_{p_{ij}}$ of the theoretical rating matrix as shown in Fig 1.

Eq. (9) is used to determine the components of real rating matrix for positive and negative criteria as shown in Fig 2.

Eq. (11) is used to determine the total gap matrix as shown in Fig 3.

Eq. (12) is used to determine the final score of each alternative as shown in Fig 4.

We rank the alternatives as shown in Fig 5.

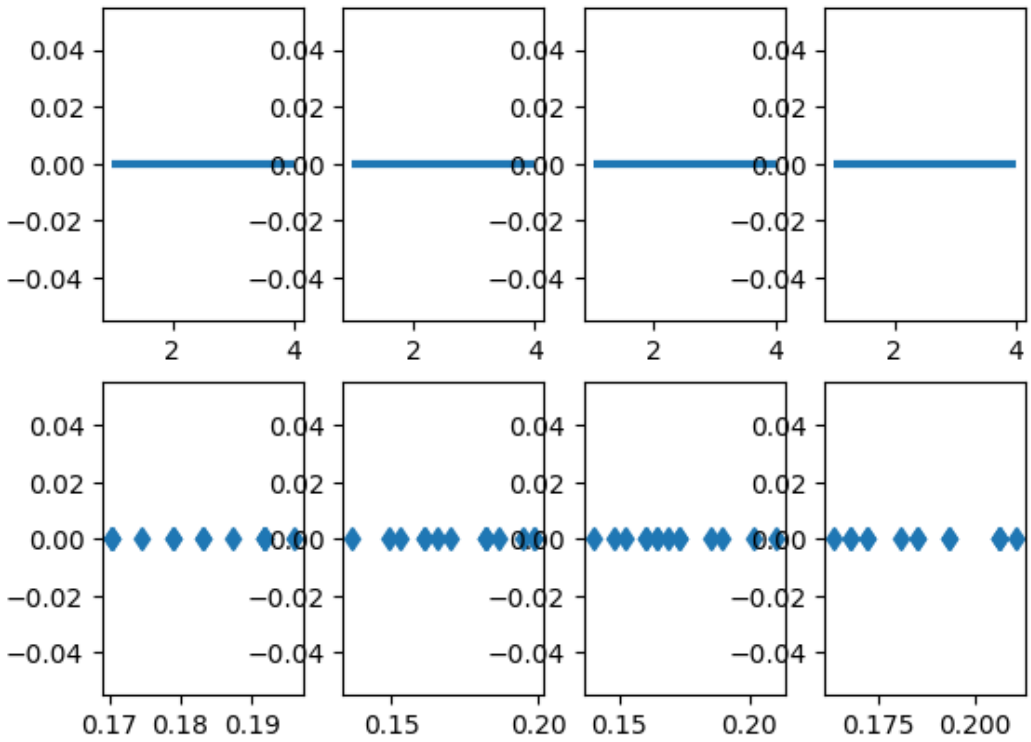

Fig 1. The theoretical rating matrix.

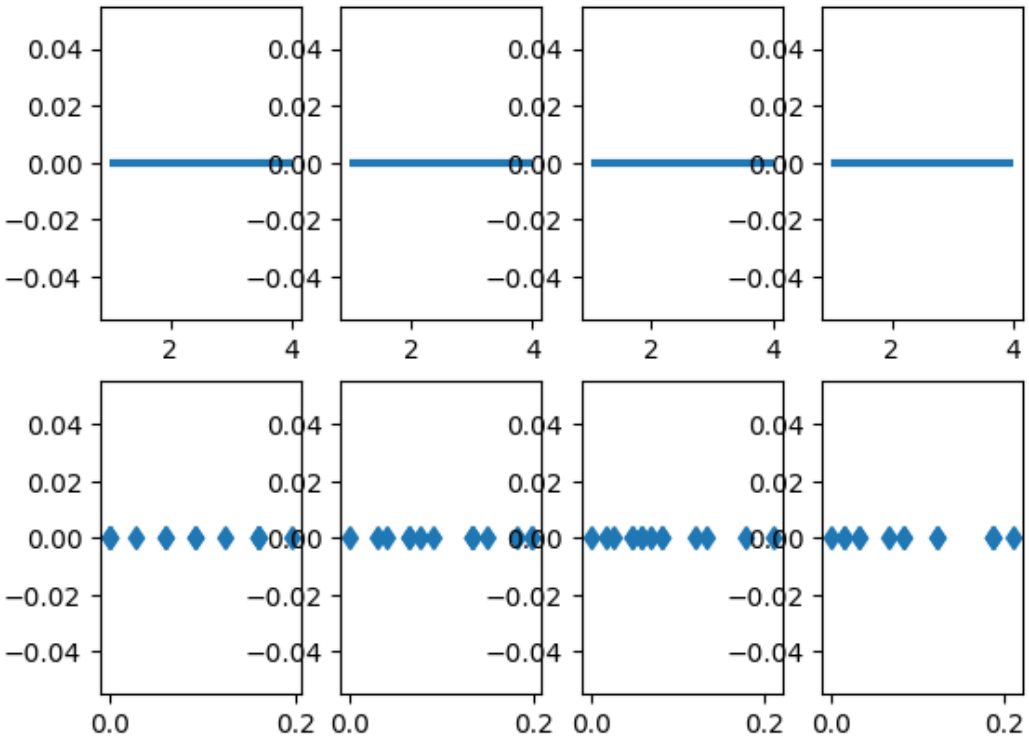

Fig 2. The real rating matrix.

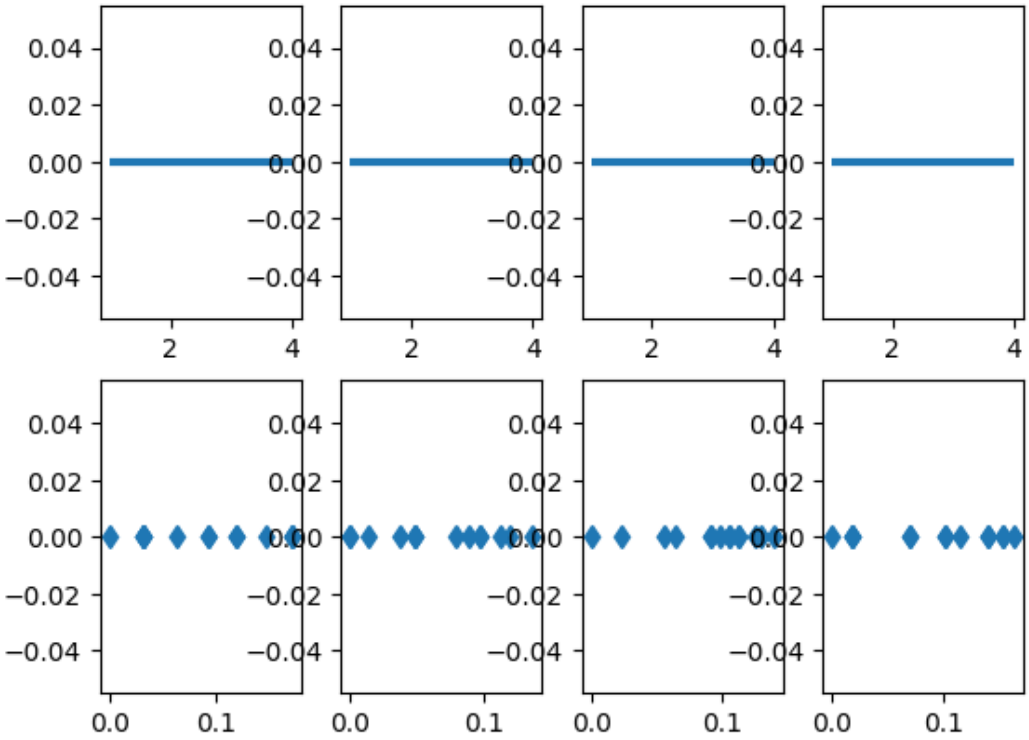

Fig 3. The total gap matrix.

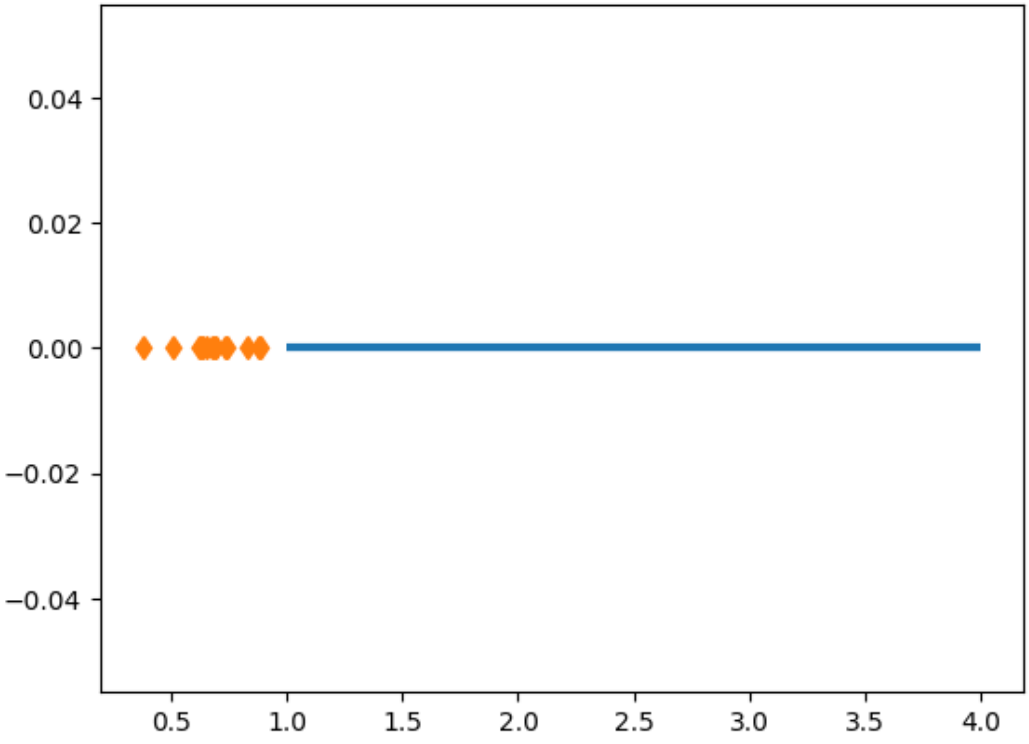

Fig 4. The final score of each alternative.

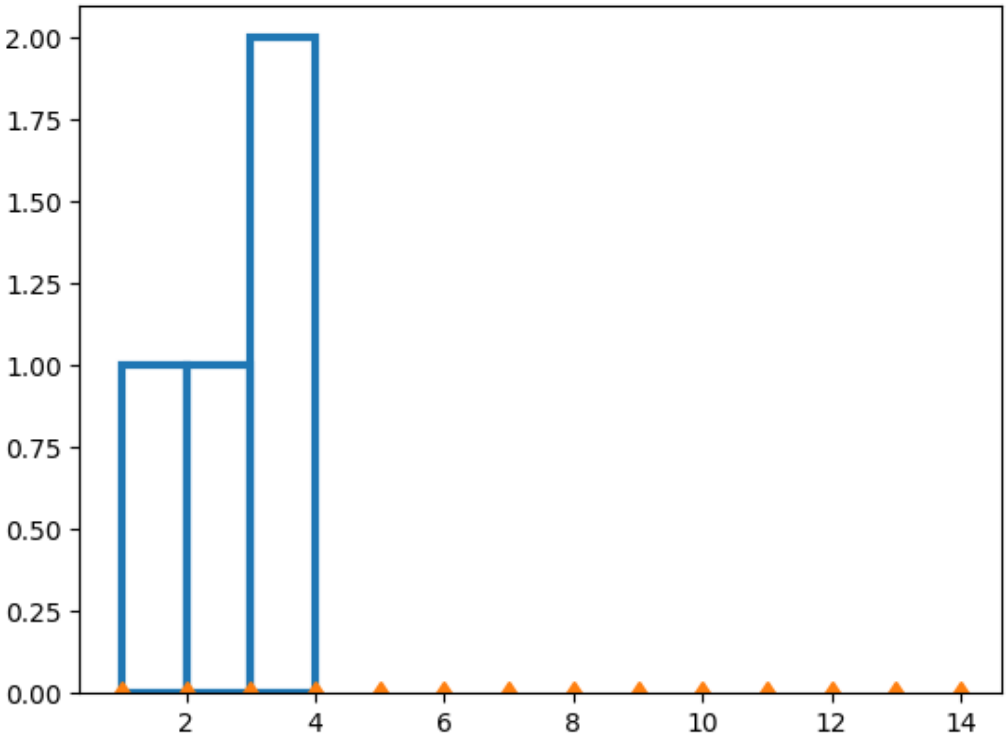

Fig 5. The rank the alternatives.

4. Analysis

This section shows the sensitivity analysis by changing in the criteria weights by different cases as shown in Fig 6. Then we apply the proposed approach in these cases. Fig 7 shows the final score values. Fig 8 shows the ranks of alternatives.

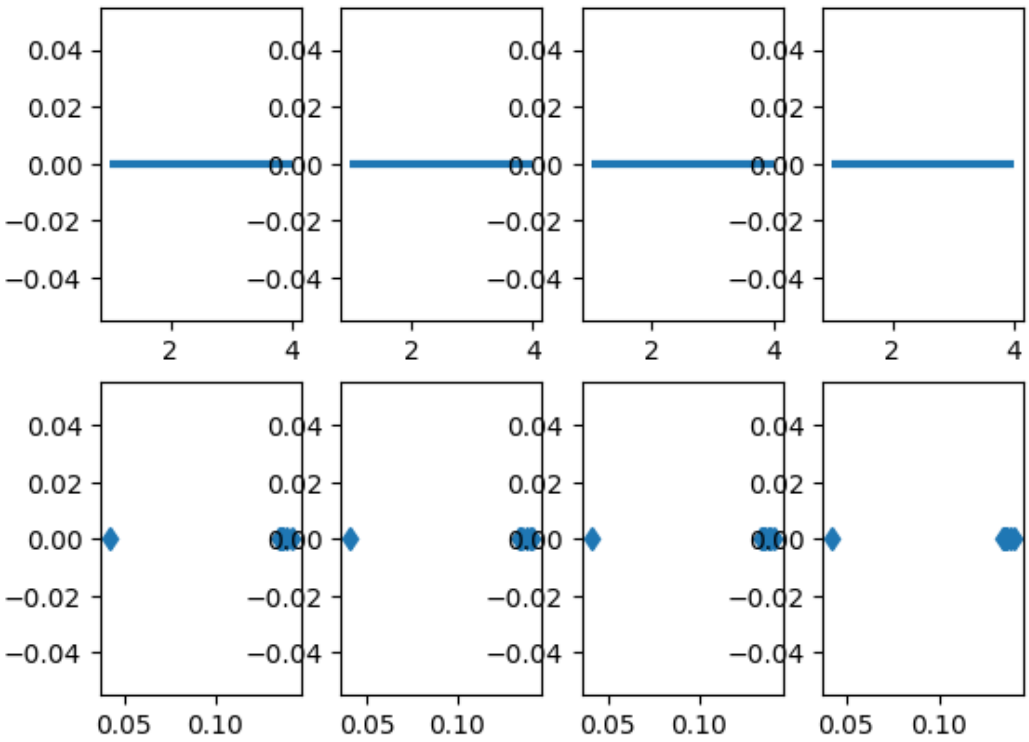

Fig 6. The different criteria weights.

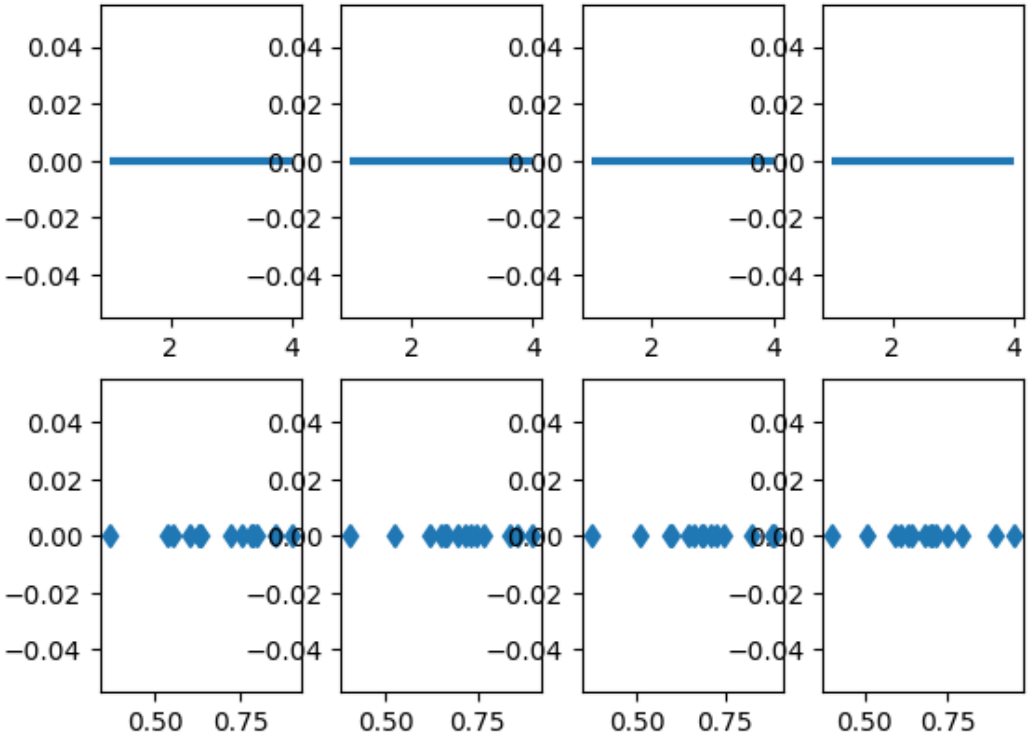

Fig 7. The different final values.

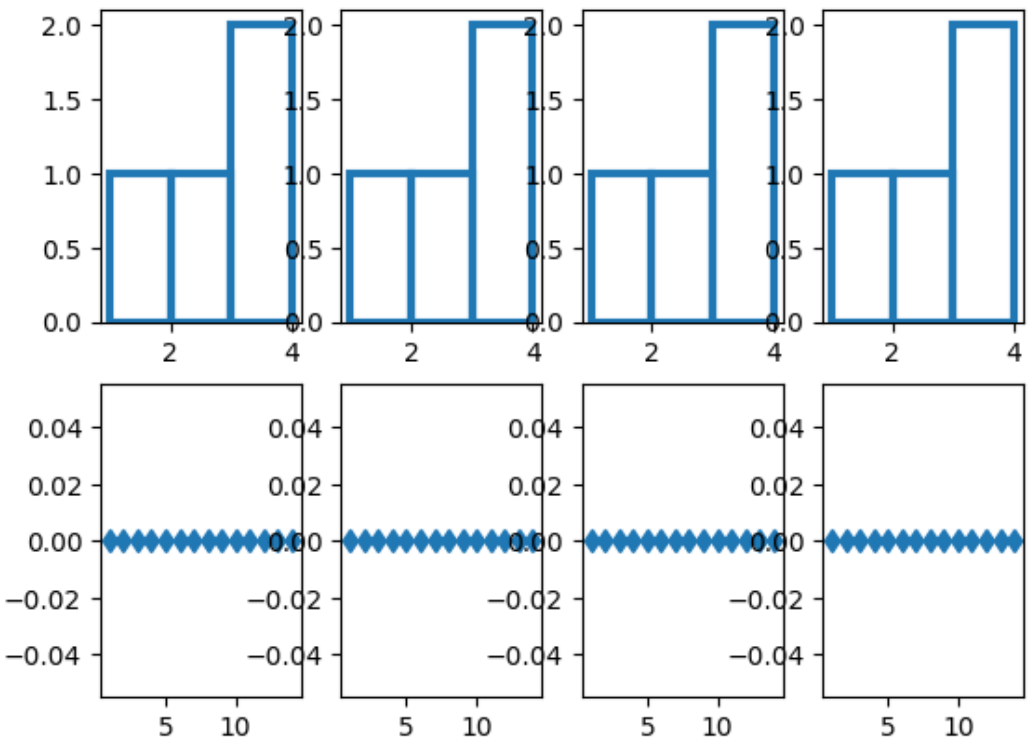

Fig 8. The ranks of alternatives.

Fig 6 shows how each **criterio**n (C1 to C8) is weighted across eight different cases. Each case may represent a different scenario, model variation, or expert opinion. The goal is likely to analyze the consistency and variability of the importance given to each criterion.

C1 (Criteria 1):

- Range: ~0.0405 to ~0.1355
- C1 has a relatively stable importance across Cases 2–8 (around 0.135), but a sharp drop in Case 1 (~0.040), indicating a test for reduced impact or a scenario where C1 is considered far less important.

C2 (Criteria 2):

- Range: ~0.0415 to ~0.1385
- Similar to C1, C2 shows high weights in most cases (~0.138), except for Case 2, where its value drops (~0.0415). This might simulate a case where its influence is minimal.

C3 (Criteria 3):

- Range: ~0.0406 to ~0.1357

- C3 maintains consistency around 0.135, except in Case 3 (where it drops to ~0.0406), perhaps representing a stress test for its absence or de-emphasis.

C4 (Criteria 4):

- Range: ~0.0402 to ~0.1348
- Stable in all cases except for Case 4, where it drops to ~0.0402, possibly simulating a reduced relevance scenario.

C5 (Criteria 5):

- Range: ~0.0421 to ~0.1404
- Consistent high importance (~0.140) across most cases, with a notable drop in Case 5 (~0.0421), suggesting a scenario where sustainability (or the equivalent topic of C5) is underplayed.

C6 (Criteria 6):

- Range: ~0.0409 to ~0.1367
- Values hover close to 0.136 in all but Case 6, where it sharply drops, suggesting this scenario devalues C6.

C7 (Criteria 7):

- Range: ~0.0406 to ~0.1357
- Like C3, its weight is reduced significantly only in Case 7, likely testing a minimal-impact situation.

C8 (Criteria 8):

- Range: ~0.0425 to ~0.1417
- Highest values among all criteria, especially in Case 8 (~0.0425), which shows a minimized weight. Other cases maintain a high and steady presence, indicating its significance.
- Cases 1–8 each appear to test the sensitivity of a single criterion by reducing its weight significantly while keeping others stable.
- The highest overall importance seems to belong to C8, while each criterion takes a turn being the least influential in one of the cases

Fig 8 shows the ranking values you provided, where each alternative (A1 to A14) is evaluated across 8 cases, and 1 is the best (lowest rank) while 14 is the worst (highest rank). These ranks may reflect evaluations like performance, effectiveness, or priority in a decision-making context.

A1

- Ranks between 4 and 11.
- Performs moderately well, best in Case 1 (4), worst in Case 7 (11).
- Shows stable middle-ground performance, possibly a consistent but not top alternative.

A2

- Ranks between 3 and 8.
- One of the stronger alternatives, especially in Cases 1 and 6–7 (rank 3).
- Shows reliable effectiveness.

A3

- Ranks between 5 and 9.
- Mostly mid-level performer, slightly weaker in Cases 3–5 (rank 9).
- Not outstanding but consistently average.

A4

- Ranks 14 in almost all cases, except Case 3 (12) and Case 5 (13).
- Worst-performing alternative overall, consistently at the bottom.

A5

- Ranks between 3 and 7.
- Another strong contender, especially in Cases 2–5.
- Consistent and solid performance.

A6

- Ranked 1 in every case.
- Top-performing alternative, best in all 8 scenarios.
- Most likely the optimal choice across all evaluation settings.

A7

- Ranked 2 in every case.
- Always second-best; highly competitive.
- Excellent consistency, narrowly behind A6.

A8

- Ranks between 3 and 8.
- Slightly less stable than A2 or A5, but generally strong.
- Notably performs very well in Case 8 (rank 3).

A9

- Ranks between 9 and 12.
- Performs on the lower end, worst in Case 5 (rank 12).
- Consistently below average.

A10

- Ranks between 11 and 14.
- Among the poorer performers, especially in Case 3 (14).
- Not likely to be recommended.

A11

- Ranks between 8 and 11.
- Lower-mid performer with slight variation.
- Not the worst, but not strong enough to be a top pick.

A12

- Ranks between 12 and 14.
- One of the least effective alternatives overall.
- Frequently near the bottom.

A13

- Ranks between 4 and 9.
- Solid mid-to-high performer, especially strong in Case 2 (rank 4).
- Could be a hidden strong candidate depending on the scenario.

A14

- Ranks between 6 and 11.
- Stable average performer.
- May be considered in scenarios needing balanced trade-offs.

- ✓ A6 and A7 are clear front-runners across all cases.
- ✓ A4 and A12 are the weakest alternatives with consistently low rankings.
- ✓ A2, A5, A8, and A13 form the mid-to-high performing group that may be useful depending on context.

5. Conclusions

This study underlines the necessity of aligning instructional strategies with a diverse range of learning goals and student needs. By employing a structured evaluation framework, educators can objectively assess which approaches foster the most effective language learning outcomes. The research also highlights the dynamic nature of pedagogy in language instruction, suggesting that hybrid models incorporating multiple strategies may offer the best results. Ultimately, these insights pave the way for more responsive and impactful English teaching in higher education. We used the MAIRCA method to rank alternatives. The average method is used to compute the criteria weights. The case study is introduced by eight criteria and 14 alternatives. The results of sensitivity analysis show the ranks of alternatives are stable under different cases.

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