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| RESEARCH ARTICLE

Utilizing Multiple Intelligences Theory in College English Teaching: Strategies to Enhance Low-Proficiency Learners' English Language Skills

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| ABSTRACT
This study explores the application of Howard Gardner's Multiple Intelligences (MI) theory in enhancing the English proficiency of Low-Proficiency Learners among university students in China. Amid growing concerns over the generally weak English performance of college students, this research investigates whether MI-informed teaching strategies can provide effective pedagogical interventions. A quasi-experimental design was employed, involving two parallel classes of non-English majors: one experimental group received MI-based English instruction, while the control group followed traditional teaching methods. The intervention lasted for 16 weeks and integrated various intelligence types - linguistic, musical, bodily-kinesthetic, interpersonal, intrapersonal, and more - into classroom activities such as role plays, group discussions, music-assisted pronunciation training, and reflective writing tasks. Data were collected through pre- and post-tests, motivation surveys, classroom observations, and semi-structured interviews. The results demonstrated that the experimental group showed significantly greater improvement in listening, reading, and writing skills compared to the control group. Additionally, students exhibited increased motivation, higher engagement, and more positive attitudes toward language learning. The study also found that matching instructional activities to students' dominant intelligence types contributed to more personalized and effective learning experiences. The findings confirm that MI-based teaching is particularly beneficial for Low-Proficiency Learners by activating their potential through diversified learning channels. The study offers both theoretical and practical implications, suggesting that MI theory can serve as a viable framework for differentiated instruction in tertiary English education. Recommendations are provided for curriculum designers, English instructors, and institutional leaders to incorporate intelligence-responsive practices into teaching and assessment. Future research may further explore the long-term impact of MI integration and its cross-disciplinary applications.

| KEYWORDS
Multiple Intelligences Theory, College English Teaching, Low-Proficiency Learners, Language Skill Enhancement, Teaching Strategies

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1. Introduction

1.1 Research Background

Against the backdrop of rapid globalization and informatization, college English, as a vital component of higher education, has become a key course for cultivating students' intercultural communication skills and overall competence. With increasingly frequent international exchanges, English is no longer merely a language but an essential tool for connecting different cultures and facilitating the exchange of ideas. However, a prominent issue commonly faced in the practical teaching of English in many universities is the notably low English proficiency among a considerable proportion of college students, particularly evident in foundational skills such as listening, speaking, reading, and writing (Wu & Tarc, 2021). According to the China 2022 English

Assessment and Teaching Annual Report (2023), over 30% of college students failed to meet the basic requirements of the National College English Test Band 4 (CET-4), showing particular deficiencies in applied skills (Ruan & Jacob, 2009). This situation not only negatively impacts students' academic performance but also constrains their career development prospects.

English proficiency is significant not only for students' academic achievements but also profoundly influences their future career development and social competitiveness. Graduates with strong English skills generally hold an advantage in the job market, enabling them to better adapt to diverse roles in multinational corporations, international exchanges, and cross-border collaborations (Chen & Li, 2022). As global economic integration accelerates, corporate requirements for employees' language abilities continue to rise, making good English proficiency a basic threshold for many positions. Consequently, how to effectively enhance the language abilities of college students, especially those with a weak foundation in English, has become a crucial issue in the reform of college English teaching.

To address this challenge, the education sector and academia have begun exploring innovative teaching models such as the Multiple Intelligences (MI) teaching approach, aiming to stimulate students' learning interest and improve their English application skills through diversified teaching strategies. The Multiple Intelligences theory emphasizes that every student possesses a unique combination of intelligences, and designing teaching activities tailored to different intelligence types can effectively enhance student engagement and learning outcomes. Furthermore, with the rapid development of information technology, the application of online learning platforms and multimedia teaching resources also presents new possibilities for English language teaching. These emerging teaching methods and tools can create richer and more flexible learning environments for students, thereby promoting the enhancement of their language abilities. Therefore, this study aims to investigate the impact of the MI teaching approach on the English learning outcomes of college students, hoping to provide empirical support and a theoretical basis for the reform of college English teaching. Through an in-depth analysis of the implementation effects of the MI teaching method, we hope to provide feasible strategies and suggestions for improving students' English proficiency and comprehensive competencies.

1.2 Research Objectives

This research aims to explore the practical application of the Multiple Intelligences (MI) Theory in English language teaching, with the goal of constructing a more personalized, differentiated, and practice-oriented teaching model. Proposed by Howard Gardner, the MI Theory posits that an individual's intelligence is not a single dimension but comprises multiple dimensions, including linguistic, logical-mathematical, spatial, bodily-kinesthetic, interpersonal, intrapersonal, naturalistic, and musical intelligences (Davis et al., 2011). This theory challenges the traditional, unitary definition of "intelligence" and provides educators with more diverse and flexible pathways in instructional design.

Focusing primarily on university students with low English proficiency, this study attempts to integrate the MI Theory into classroom teaching by designing instructional activities that cater to different intelligence types, thereby stimulating students' learning interest and enhancing their language application skills and learning effectiveness (Ahmad, 2022). Specifically, through practical research, we aim to explore how to tailor learning strategies and teaching content to students' individual differences to meet their diverse learning needs. By implementing the MI teaching approach, the research will focus on analyzing improvements in students' listening, speaking, reading, and writing abilities, as well as changes in their classroom engagement and learning motivation.

Furthermore, this study hopes to provide educators with concrete guidance for implementing the MI teaching approach, assisting them in applying this theory more effectively in practical teaching. By establishing an MI-based teaching framework, we aspire to promote reform and innovation in college English teaching, create richer and more varied learning experiences for students, and thereby foster their holistic development and lifelong learning capabilities.

1.3 Significance of the Study

The conduct of this study holds significant theoretical and practical value. Theoretically, it helps deepen the understanding of how MI Theory integrates with foreign language teaching, expands the current theoretical system of college English teaching, and promotes the interdisciplinary integration of English language teaching and psychological theory (Ghaznavi et al., 2021). Although research on MI Theory has gradually increased in recent years, systematic empirical studies specifically focusing on its application in college English teaching, particularly for the "low-proficiency" student demographic, remain relatively scarce (Cahapay, 2020). Thus, this study fills a gap in this specific area of research. Practically, the study provides operable teaching strategies for frontline English teachers. By identifying and stimulating students' dominant intelligences, teachers can design teaching activities that foster a greater sense of participation and knowledge construction, effectively enhancing students' language output and learning confidence (Huang & Dou, 2024). For instance, for students with strong musical intelligence, English songs and rhythm training can be used to reinforce their pronunciation and intonation; for those with bodily-kinesthetic

intelligence, role-playing and situational dialogues can activate their language expression skills (Usuluddin et al., 2024). Such intelligence-driven instructional designs not only enrich classroom teaching formats but also align better with the cognitive characteristics of individual student differences. In summary, within the current context where the quality of college English teaching urgently needs improvement and teaching models require innovation, exploring the application of MI Theory in English teaching, particularly its use in teaching interventions for low-proficiency college students, possesses not only practical urgency but also demonstrates broad research prospects and practical potential (Cai, 2024).

2. Literature Review

2.1 Overview of Multiple Intelligences Theory

The Multiple Intelligences (MI) Theory was first proposed in 1983 by Howard Gardner, an educational psychologist at Harvard University, as a challenge to traditional conceptions of intelligence. This theory posits that "intelligence" is not a unitary entity reliant solely on linguistic or logical abilities, but rather comprises eight relatively independent yet interconnected types of intelligence (Gardner, 1983). These eight intelligences are: linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalist. In recent years, Gardner himself has suggested "existential intelligence" as a potential ninth intelligence, although it has not yet been widely accepted (Gardner, 2006). The introduction of this theory has prompted educators to re-examine students' learning capacities and potential, advocating for educational approaches that pay greater attention to individual differences.

In contrast to traditional education's emphasis on linguistic and logical abilities, MI Theory underscores the importance of recognizing the variability and diversity in individuals' intelligence profiles (Díaz-Posada et al., 2017). For instance, some students who are weaker in linguistic intelligence might demonstrate strengths in bodily-kinesthetic or musical intelligences. This unique "intelligence profile" suggests that their optimal pathways for language learning should also be personalized (Mardhatillah & Suharyadi, 2023). Consequently, educators should design personalized teaching activities based on students' intellectual characteristics to accommodate the diverse learning needs of different individuals.

The influence of MI Theory extends beyond classroom teaching, also driving reforms in educational assessment and curriculum design. Many educational institutions have begun adopting MI-based assessment tools to gain a comprehensive understanding of students' abilities and potential. This assessment approach helps teachers better identify students' strengths and weaknesses, thereby enabling more effective interventions during the teaching process (Berrios et al., 2021). Furthermore, MI Theory also offers a new perspective for interdisciplinary teaching, allowing educators to create richer learning experiences by integrating knowledge and skills from different disciplines.

In practical application, MI Theory has been widely utilized in various educational contexts, including early childhood education, basic education, and higher education. Numerous studies have shown that teaching methods based on MI Theory can significantly enhance students' learning motivation and sense of achievement, helping them attain better performance in areas such as language learning and scientific exploration. Therefore, MI Theory not only provides a theoretical foundation for educational practice but also offers important guiding principles for educational reform.

2.2 Application of Multiple Intelligences Theory in Language Teaching

In the field of language teaching, researchers generally acknowledge that the Multiple Intelligences Theory contributes to constructing diverse and highly participatory teaching activities, thereby enhancing students' learning motivation and comprehensive language application abilities. Internationally, Armstrong (2017) proposed a language teaching model based on Multiple Intelligences, emphasizing the engagement of students' multidimensional intelligences in the language learning process through forms such as task-based learning, project-based learning, and situational simulations.

Domestic research in this area started slightly later but has shown a rapid development trend in recent years. In an experimental study, Zhifu Liu (2019) introduced Multiple Intelligences-based teaching activities into college English classrooms and found that students' learning enthusiasm and language output quality significantly improved, with particularly notable benefits for low- and intermediate-level students. Furthermore, several scholars advocate for integrating the Multiple Intelligences Theory with collaborative learning, Task-Based Language Teaching (TBLT), and Project-Based Learning (PBL) to form a "hybrid teaching model," thereby facilitating the transition from a "teacher-centered" to a "student-centered" approach (Al & Behforouz, 2023).

In practical instructional design, different intelligence types correspond to different teaching activities. For example, linguistic intelligence can be cultivated through reading and writing training; musical intelligence can be enhanced using English songs and rhythm training to facilitate pronunciation and intonation learning; bodily-kinesthetic intelligence is suitable for role-playing or situational teaching activities; while interpersonal intelligence can be stimulated through group discussions and collaborative

tasks (Teng & Wang, 2021). This "multi-channel input" teaching model helps overcome issues such as low student participation and insufficient learning interest caused by the single input pathway in traditional classrooms (Gao & Shen, 2021).

2.3 Challenges in English Learning for Low-Proficiency University Students

In the current landscape of college English teaching, low-proficiency students face multiple and interconnected learning difficulties. These challenges not only hinder their language acquisition but also significantly impact their overall academic confidence and psychological well-being.

Firstly, inadequate learning motivation constitutes a primary obstacle to their language acquisition efficiency (Dörnyei, 2001). Prolonged lack of successful learning experiences often leads these students to develop "learned helplessness" - a psychological state characterized by self-doubt and diminished effort after repeated failures (He, 2021). Instances such as experiencing embarrassment during oral activities or consistent underperformance in examinations can progressively erode their learning motivation, creating a vicious cycle where decreased engagement leads to poorer outcomes, which in turn further reduces motivation.

Secondly, these students typically lack systematic and effective learning strategies, which compounds their learning difficulties. In vocabulary acquisition, they tend to rely on mechanical memorization rather than employing strategic approaches like morphological analysis or contextual learning. For grammar mastery, they often remain at the level of rule memorization without developing the ability to apply grammatical knowledge flexibly in practical contexts. In developing higher-order skills like listening and reading, the absence of proper techniques makes them particularly vulnerable to challenges (Pang et al., 2024). These strategic deficiencies not only result in inefficient learning but also prevent students from effectively demonstrating their knowledge in standardized testing situations.

Furthermore, the prevalence of uniform teaching methodologies and rigid assessment systems significantly contributes to the passive learning posture of low-proficiency students. Many English classrooms continue to operate through teacher-dominated instruction with limited variation in teaching approaches, failing to accommodate the diverse cognitive styles and ability levels among students (Lei & Qin, 2022). In large-class teaching with standardized pacing, instructors often cannot provide adequate attention to students who need more time to comprehend the material. The examination-oriented evaluation system tends to reinforce negative self-perceptions among consistently low-performing students, who may internalize the identity of "language learning failures." This undifferentiated educational environment frequently leads to progressive academic decline and gradual disengagement from classroom participation.

In response to these challenges, educational researchers have advocated for transforming teaching paradigms through integrating findings from educational psychology and cognitive science (Pawliszko, 2025). Suggested approaches include diagnosing students' cognitive load and affective states to design appropriate instructional scaffolding, and implementing metacognitive strategy training to enhance students' awareness and regulation of their learning processes. These proposals share the common objective of moving beyond the conventional "one-size-fits-all" model toward creating learning environments that can adapt to individual differences.

Within this context, Multiple Intelligences (MI) Theory offers a promising framework for addressing the learning challenges of low-proficiency students. This theoretical perspective recognizes that individuals possess distinctive profiles of intellectual strengths across domains such as linguistic, logical-mathematical, spatial, musical, and bodily-kinesthetic capacities. For students who struggle in conventional language learning contexts, teachers can identify their dominant intelligences in other areas - such as musical rhythm perception, visual-spatial processing, or physical expression - and subsequently customize instructional content and methods accordingly (Xu, 2021). For example, students with strong musical intelligence might benefit from using English songs and rhythm exercises to improve pronunciation, while visually-oriented learners could be supported through visual organizers and illustrated contexts to facilitate vocabulary and grammar acquisition.

This differentiated approach to teaching design can simultaneously activate students' suppressed interest in participation and help rebuild their confidence in language learning through leveraging their strengths. When students experience success through their dominant intelligence channels, their intrinsic motivation tends to regenerate, potentially initiating positive developmental trajectories in language acquisition. Therefore, integrating MI Theory into English instruction for low-proficiency students represents not merely a methodological alternative, but rather a fundamental reorientation toward addressing learning difficulties and reconstructing learner identities.

3. Methodology

3.1 Participants and Grouping

The participants for this study were recruited from two foundational English classes comprising first-year students (Class of 2024) at Guilin University of Technology in China. The total sample consisted of 80 students, all of whom were non-English majors. Based on the results of a pre-study English proficiency test, two classes with nearly identical average scores were selected and assigned to the experimental group and the control group, with 40 students in each group. The experimental group received the teaching intervention designed based on the principles of Multiple Intelligences Theory, while the control group continued with the conventional, teacher-centered instructional approach.

Table 1: Demographic and Baseline Characteristics of Participants

Group Type	Number of Participants	Average Entrance English Score
Experimental Group (MI-based Instruction)	40	61.2
Control Group (Conventional Instruction)	40	60.8

3.2 Teaching Intervention Design

The teaching intervention for this study spanned a duration of 16 weeks. The curriculum for the experimental group was designed based on the eight intelligence types proposed by Gardner (Davis et al., 2011). Each week incorporated a variety of teaching activities–including scenario-based role-plays, English song appreciation and analysis, group project tasks, and grammar analysis with visual mapping exercises–aimed at stimulating students' multiple intelligences. The activity design emphasized a student-centered approach, highlighting personalization, interactivity, and creativity. The correspondence between the teaching content and the intelligence types is illustrated in Table 2 below.

Table 2: Examples of Multiple Intelligences-Based Instructional Design

Intelligence Type	Example Teaching Activity	Target Skill(s)
Linguistic	Speeches, Writing Practice	Vocabulary expression, Grammatical usage
Musical	Rewriting English Songs, Singing and Reading Aloud	Pronunciation, Intonation, Language Sense
Bodily-Kinesthetic	Role-playing, Scenario Simulations	Communication strategies, Bodily expression
Interpersonal	Group Discussions, Collaborative Writing	Cooperative awareness, Communication skills
Intrapersonal	Learning Journals, Self-assessment	Self-monitoring, Learning reflection

The control group, in contrast, continued to receive conventional, lecture-based instruction. Their curriculum was primarily structured around vocabulary and grammar knowledge, supplemented by intensive reading exercises and translation practice.

3.3 Data Collection Methods

To comprehensively evaluate the impact of the Multiple Intelligences (MI) teaching approach on students' English learning outcomes in this study, three distinct data collection methods were designed (as outlined in Table 3) to ensure data diversity and reliability.

First, English proficiency assessments were conducted. These assessments consisted of a pre-test administered before the intervention began and a post-test administered after its conclusion. The tests covered three key modules: listening, reading, and writing, aiming to holistically evaluate students' comprehensive language application skills. This method allowed for the quantification of changes in students' English proficiency levels before and after the experiment, providing objective evidence for analyzing the effectiveness of the MI-based instruction.

Second, a questionnaire survey comprising 20 items was designed to gain deeper insights into students' attitudes and perceptions during the learning process. The questionnaire covered multiple dimensions, including learning interest, willingness to participate, classroom satisfaction, and self-directed learning capacity. It utilized a five-point Likert scale for scoring to facilitate quantitative analysis. The questionnaire was administered during both the pre-test and post-test phases. Comparative analysis of the responses helps to clearly reflect changes in student attitudes and motivation throughout the implementation of the intervention. This data collection method not only provides quantitative data but also helps to reveal students' subjective perceptions of the MI teaching approach.

Finally, classroom observations and interviews constituted a crucial component of the research. Researchers conducted classroom observations of the experimental group every two weeks, documenting classroom interactions, student participation levels, and the implementation effectiveness of the teaching activities. This observational approach provided firsthand data from the teaching environment, offering further understanding of student performance within the MI-based teaching context. Additionally, upon completion of the experiment, 10 students from the experimental group were randomly selected for semi-structured interviews. These interviews explored in depth their acceptance of and subjective feelings towards the MI teaching method. The discussions centered around students' learning experiences, their views on the teaching methodology, and their perceptions of their own improvement in English proficiency, aiming to fully capture the authentic experiences of students under the MI teaching approach.

Table 3: Data Collection Methods Design

Data Collection Method	Data Type	Collection Time	Specific Content / Indicators	Purpose
English Proficiency Assessment	Quantitative	Pre-test & Post-test	Test scores in Listening, Reading, and Writing modules	To quantify changes in English proficiency before/after the experiment and assess MI effectiveness
Questionnaire Survey	Quantitative & Qualitative	Pre-test & Post-test	20 items on Learning Interest, Participation Willingness, Classroom Satisfaction, Self-directed Learning, etc.	To reflect changes in student attitudes & motivation, and reveal subjective perceptions of MI teaching
Classroom Observation & Interviews	Qualitative	Bi-weekly (Obs.), Post-experiment (Int.)	Classroom Interaction, Student Participation, Interview content (Learning Experience, Views on Method)	To obtain firsthand classroom data and gain in-depth understanding of student acceptance & experience of MI teaching

Through the integrated application of these three data collection methods detailed in Table 3, this study aims to provide a comprehensive and systematic evaluation of the impact of the Multiple Intelligences teaching approach on students' English learning, thereby offering valuable references and guidance for future teaching practices.

3.4 Data Analysis Methods

The study utilized SPSS 26.0 software for processing the quantitative data. The primary analytical methods employed were as follows:

Paired-samples t-tests: We will use paired-samples t-tests to examine the changes in English test scores between the pre-test and post-test for both the experimental and control groups, and to determine the significance of any differences. This approach enables the assessment of the practical impact of the MI-based teaching method on improving students' English proficiency and helps clarify the effectiveness of the teaching intervention. This method is particularly suitable for comparing the performance of the same group of students at different time points, thereby revealing genuine changes attributable to the instructional effect.

Descriptive Statistical Analysis: Descriptive statistical analysis will be applied to the questionnaire data to examine measures of central tendency, including means and medians, as well as measures of variation. This analysis will help us understand the overall performance and changes in areas such as students' learning interest, willingness to participate, and classroom satisfaction. Descriptive statistics of the questionnaire data will allow for an intuitive grasp of student attitudes and perceptions within the MI-based teaching environment, providing a basis for subsequent instructional adjustments.

Content Analysis: Thematic coding and categorization will be performed on the interview transcripts and classroom observation records. This method will aid in identifying patterns in student learning behaviors and psychological shifts, facilitating a deeper understanding of their experiences and feedback regarding the MI-based instruction. Through the systematic analysis of qualitative data, we can gain a more comprehensive perspective and uncover the underlying reasons and influencing factors behind the quantitative findings.

The data analysis methods outlined above will provide a multi-dimensional evaluation of the effectiveness of the Multiple Intelligences teaching intervention, offering robust data support for the optimization of future teaching strategies (Creswell, 2014). This diversified analytical approach ensures the comprehensiveness and depth of the research findings, providing valuable insights for future educational practices.

4. Results

4.1 Effects on English Proficiency Enhancement

In this study, a comprehensive assessment of English proficiency was conducted, covering three key modules: listening, reading, and writing, with each module scored out of a maximum of 100 points. To evaluate the effect of the teaching intervention, paired-samples t-tests were employed to compare the score differences between the pre-test and post-test for students in both the experimental and control groups. This method allows for a more precise determination of the intervention's impact on improving students' English proficiency.

Table 4: Comparison of English Test Scores Between Experimental and Control Groups (Pre-test vs. Post-test)

Test Module	Experimental Group Pretest Mean	Experimental Group Post-test Mean	Gain	Control Group Pretest Mean	Control Group Post-test Mean	Gain
Listening	56.3	70.4	+14.1	55.8	60.2	+4.4
Reading	59.2	73.1	+13.9	59.5	64.0	+4.5
Writing	54.8	68.7	+13.9	55.2	59.3	+4.1
Total Score	56.8	70.7	+13.9	56.8	61.2	+4.4

The data presented in Table 4 reveal notable differences in performance between the experimental and control groups across all test modules.

In the listening test, the experimental group's mean score increased from a pretest mean of 56.3 to a posttest mean of 70.4, representing a gain of 14.1 points. In contrast, the control group's listening score only improved from 55.8 to 60.2, a gain of 4.4 points. This result clearly indicates a significantly greater improvement in listening comprehension for the experimental group compared to the control group.

Regarding the reading test, the experimental group's mean score rose from 59.2 to 73.1, a gain of 13.9 points. Comparatively, the control group's reading score increased from 59.5 to merely 64.0, a gain of only 4.5 points. This data further corroborates the significant progress made by the experimental group in reading comprehension, demonstrating the effectiveness of the MI theory-based teaching approach.

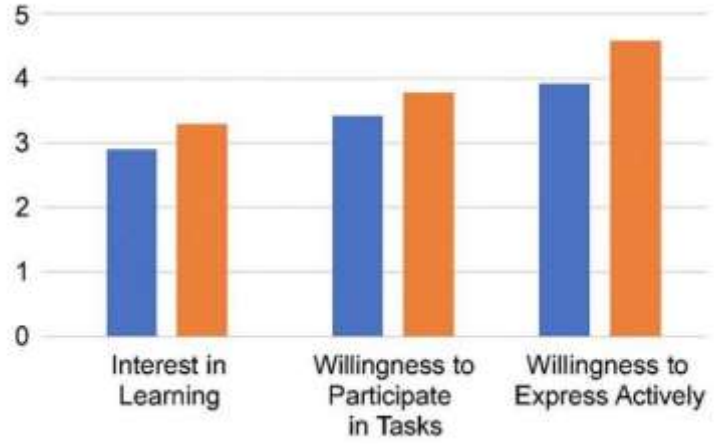
The results for the writing test are equally encouraging. The experimental group's mean score improved from 54.8 to 68.7, a gain of 13.9 points, whereas the control group's writing score increased from 55.2 to only 59.3, a gain of 4.1 points. This suggests that the experimental group also achieved significant enhancement in their writing ability.

Overall, the total score for the experimental group increased from the pretest mean of 56.8 to the posttest mean of 70.7, with an average gain of 13.9 points ($p < .01$). The control group's total score, however, only increased from 56.8 to 61.2, a gain of just 4.4 points. These findings strongly indicate that the teaching intervention based on Multiple Intelligences Theory possesses significant advantages and effectiveness in enhancing the English language skills of low-proficiency students, providing substantial support and reference for future English language teaching. This effective teaching method shows promise in helping more students achieve better outcomes in English learning.

4.2 Changes in Learning Motivation and Classroom Engagement

To thoroughly investigate the impact of the teaching intervention on students' subjective learning attitudes, this study administered a "Questionnaire on English Learning Motivation and Engagement" both before and after the implementation of the intervention. The core content of this questionnaire encompassed several key indicators, including learning interest, willingness to participate in class, and investment in self-directed learning, aiming to comprehensively evaluate changes in students' attitudes and behaviors during the learning process.

Figure 1: Changes in Learning Motivation Scores for the Experimental Group (Five-Point Scale)



Note: The bar chart shows notable improvements across motivational dimensions.

Data from Figure 1 indicate significant increases across multiple dimensions for students in the experimental group, including "Learning Interest," "Willingness to Engage in Tasks," and "Willingness to Express Themselves Actively." Specifically, the average score increases in these dimensions for the experimental group all exceeded 0.9 points, reflecting a marked enhancement in their overall learning motivation. This change was not only evident in the scores but was also manifested in the students' actual learning behaviors.

Particularly noteworthy is that in the post-test, approximately 80% of the students reported being "more willing to actively express their opinions in class," representing an increase of nearly 35 percentage points compared to the pre-test. This positive shift suggests that the Multiple Intelligences teaching model has a significant effect on stimulating the learning motivation and classroom engagement awareness of low-proficiency students. The students demonstrated more proactive and active participation in class, showing greater willingness to engage in discussions and interactions, which further enhanced their learning experience.

Furthermore, the teaching intervention also fostered students' investment in self-directed learning. Through the application of MI Theory, students not only found enjoyment in the learning process but were also able to identify their own strengths and interests across different learning tasks. This positive learning attitude motivated them to engage more in independent study outside the classroom, thereby reinforcing the knowledge acquired during lessons.

In summary, the significant improvement in learning motivation and classroom engagement among the experimental group students strongly demonstrates the effectiveness of the MI-based teaching model in stimulating students' learning interest and

engagement awareness. This finding provides solid support for the future promotion of Multiple Intelligences Theory in English language teaching, indicating that innovative teaching methods can significantly improve students' learning attitudes and promote their holistic development (Ryan & Deci, 2000). Through this approach, we can not only enhance students' English proficiency but also cultivate their capacity for self-directed learning and self-confidence, laying a solid foundation for their future studies.

4.3 Performance Alignment with Intelligence Types

To analyze the differential responses of various intelligence types to the teaching intervention, the study categorized students into three dominant profiles based on a pre-intervention intelligence assessment questionnaire: those strong in linguistic intelligence, those strong in interpersonal intelligence, and those strong in bodily-kinesthetic intelligence. Their performance changes in the post-test were then compared.

Table 5: Comparison of English Proficiency Gains by Dominant Intelligence Type (Experimental Group)

Dominant Intelligence Type	Mean Score Difference (Post-Pre)	Performance Characteristics Description
Linguistically-Inclined	+15.2	Marked improvement in reading and writing performance.
Interpersonally-Inclined	+14.7	Demonstrated excellence in group interactions and notable progress in oral skills.
Bodily-Kinesthetically-Inclined	+13.3	High participation in role-plays and effective vocabulary memorization.

As shown in Table 5, students across all three dominant intelligence profiles made significant progress in English proficiency. Students strong in linguistic intelligence showed the most pronounced improvement in the reading and writing sections, while those strong in interpersonal and bodily-kinesthetic intelligence demonstrated excellence in oral expression and classroom participation, respectively. These results further validate the "teaching students according to their aptitude" principle advocated by the Multiple Intelligences Theory (Armstrong, 2017).

4.4 Student Feedback on Teaching Activities

The study analyzed students' acceptance of the MI-based teaching activities through interviews and questionnaire feedback. The data indicate widespread student recognition of the innovative nature and sense of engagement fostered by the teaching methods.

Table 6: Experimental Group Students' Satisfaction with Teaching Activities (Percentage)

Activity Type	Very Satisfied	Satisfied	Neutral	Dissatisfied
English Song Activities	52.5%	42.5%	5%	0%
Role-play / Scenario Performances	60%	35%	5%	0%
Group Discussion Tasks	55%	40%	5%	0%
Grammar Diagramming Training	40%	50%	10%	0%

As illustrated in Table 6, students expressed the highest satisfaction with role-play/scenario performances and group collaborative tasks, with combined satisfaction rates ("Very Satisfied" + "Satisfied") exceeding 90% for both. These activities engaged multiple intelligences such as bodily-kinesthetic, linguistic, and interpersonal, and were particularly welcomed by initially lower-achieving students, helping them rebuild learning confidence in a relaxed environment (Jiang & Luk, 2016).

The findings demonstrate that the MI Theory-oriented English teaching approach not only yielded significant results in objective score improvement but also exhibited considerable advantages in stimulating students' subjective motivation, enhancing classroom engagement, and aligning with their specific intelligence profiles. The teaching intervention successfully disrupted the traditional static, "teacher-centered" instructional model, establishing instead a dynamic, interactive, "student-centered" classroom. This effectively enhanced the comprehensive English capabilities of low-proficiency university students, confirming the practical applicability of Multiple Intelligences Theory in language teaching (Wang, 2022).

5. Conclusion

5.1 Research Findings

Centered on the core theme of "Applying Multiple Intelligences Theory in English Language Teaching," this study, targeting low-proficiency university students and drawing on empirical results, validates the effectiveness and applicability of Multiple Intelligences (MI) Theory in practical instruction across multiple dimensions. These dimensions include the enhancement of students' English proficiency, the strengthening of learning motivation, the improvement of classroom engagement, and the alignment with individual intelligence differences. The research demonstrates that the experimental group showed significantly greater improvement in all language skills–listening, reading, and writing–compared to the control group, with an average total score increase of 13.9 points. This indicates that the MI-oriented instructional design possesses strong driving force in promoting the internalization of language knowledge and its practical application (Davis et al., 2011).

Students exhibited marked improvements in areas such as learning interest, self-efficacy, and engagement. Students in the experimental group generally perceived the teaching content as more interesting and the activity formats as more engaging, which helped them break free from the predicament of "passive knowledge reception" common in traditional teaching and rebuild their learning confidence (Wang, 2023). Furthermore, analysis based on intelligence type matching revealed that the teaching intervention effectively activated the dominant intelligences of students with different profiles (e.g., linguistic, interpersonal, bodily-kinesthetic). While boosting their learning motivation, it also fostered the compensation and coordinated development of their less dominant intelligences. This instructional approach embodies the practical feasibility of the "differentiated instruction" concept and offers a pathway for extending educational equity (Kotob & Ali, 2019).

In conclusion, the teaching model based on Multiple Intelligences Theory not only has a direct impact on improving the English proficiency of low-proficiency university students but also provides a practical paradigm for optimizing teaching structures, enhancing classroom quality, and realizing personalized education.

5.2 Pedagogical Implications

Based on the findings of this study, the following pedagogical recommendations are proposed for university English instructors and curriculum designers:

(1) Develop a teaching design system oriented towards "intelligence diversity": Instructors should design diversified classroom activities based on students' intelligence profiles (e.g., linguistic, musical, bodily-kinesthetic, interpersonal) to break through the traditional lecture-dominated teaching model. For instance, utilizing project-based learning, collaborative group work, and task-based language teaching can achieve "multiple pathways for language input" and "multi-dimensional output," thereby stimulating students' diverse learning potentials.

(2) Conduct assessments of students' intelligence profiles to implement differentiated instruction: Universities should administer simple Multiple Intelligences assessments at the beginning of courses to understand the distribution of students' dominant and less dominant intelligences. Based on this information, instructors can form groups strategically, match teaching tasks to intelligence strengths, optimize the allocation of teaching resources, define classroom roles appropriately, and promote both collaborative learning and individual growth.

(3) Establish a diversified feedback and dynamic assessment system: Traditional paper-and-pencil tests often fail to comprehensively reflect students' actual language ability and classroom performance. It is recommended to introduce formative assessment mechanisms, such as learning journals, performance-based assessments, and classroom observations, to continuously track and provide feedback on students' learning processes and language production skills, thereby enhancing the fairness and instructional value of evaluation.

(4) Enhance teacher training in MI-based teaching literacy: Teachers are key facilitators of pedagogical reform. Universities should strengthen training for English instructors on the understanding and practical application of MI Theory, helping them master core competencies such as intelligence recognition, activity design, and cross-intelligence integration, thus improving their teaching adaptability and innovative capacity.

5.3 Limitations and Future Research Directions

Although this study has achieved certain empirical findings, some limitations remain. For instance, the sample was confined to two classes from a single university, limiting the generalizability of the results, which requires further verification. The teaching intervention lasted only one semester, insufficient for fully observing long-term changes in students' language abilities. Furthermore, comparative research on the effects of MI-based instruction across different disciplinary backgrounds is still lacking.

Future research could expand in the following aspects: First, broaden the sample scope to include students from various tiers of universities and different academic majors to enhance the representativeness and generalizability of the findings. Second, extend the tracking period to explore the underlying mechanisms of MI-based teaching in the sustained development of students' language proficiency. Third, attempt to integrate this theory with tools such as Artificial Intelligence and big data learning analytics to construct an intelligent and personalized new ecosystem for college English teaching.

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