

The Impact of Flipped Classroom Teaching on English Learning in Chinese Vocational Schools

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Abstract

This study explores the impact of the flipped classroom teaching method on English learning in Chinese vocational schools. A quantitative approach was adopted, involving a questionnaire survey of 100 students and a four-week teaching intervention. Data were analyzed using SPSS to assess reliability, validity, and correlations among variables. The findings reveal that the flipped classroom significantly enhances students' English proficiency, particularly in learning motivation, communication competence and comprehensive quality. However, challenges such as limited digital teaching resources, uneven teacher training, and students' lack of self-discipline in pre-class preparation hinder optimal implementation. The study contributes theoretically by enriching the discourse on flipped classroom pedagogy within vocational education and provides practical insights for educators to design more interactive, learner-centered classrooms. Recommendations include strengthening institutional support, enhancing teacher training, and fostering students' autonomous learning skills. Future research should focus on long-term effects, cross-disciplinary integration, and adaptations to multicultural learning environments to maximize the potential of flipped classroom teaching method in vocational schools.

Keywords: Flipped Classroom Teaching Method, English Learning, Chinese Vocational Schools, English Proficiency, Learning Motivation

Introduction

Vocational education in China has developed rapidly, with a growing emphasis on cultivating students' practical skills, innovation competence, and comprehensive quality. The Ministry of Education (MOE) has introduced a series of policies to improve the quality of education and the overall quality of students. These policy emphasizes the improvement of education quality and innovation capacity, encouraging schools to carry out teaching reforms, adopt modern teaching methods, and improve innovative thinking and overall quality of students. The Double Reduction policy aims to reduce the burden of excessive homework and off-campus tutoring for primary and vocational school students. It encourages schools to improve in-class teaching quality so students do not need as much extra tutoring. (Double Reduction Policy, 2021). English as a core subject in vocational schools, plays a crucial role not only in enhancing students' communication skills but also in enhancing students' competitiveness in the job market.

However, traditional English teaching in vocational schools is often teacher-centered, focusing heavily on rote memorization and passive learning. (Zhen , 2023).With teachers controlling both the content and pace of teaching, students have few opportunities for independent thinking and learning.The learning interest and classroom participation are generally low. Mechanistic teaching methods and limited interaction result in a monotonous learning experience, reducing students' enthusiasm and active involvement. Traditional classrooms focus on theoretical knowledge rather than real-world communication, leaving students unprepared to use English effectively in practical or professional contexts.Individual differences among students are often neglected, which can hinder personalized learning. Knowledge acquired through memorization tends to be easily forgotten, and students rarely develop sustainable language proficiency or critical thinking skills.

Flipped classroom teaching method has received increasing attention, this teaching model has emerged as an innovative alternative to traditional teaching.Recent studies have shown that the flipped classroom can improve students' dependent learning, learning engagement, and critical thinking.Flipped classroom learning model has been well-implemented in teaching grammar.(Berlinda Mandasari & Achmad Yudi Wahyudin,2021).Flipped Classrooms benefit both students and teachers. Benefits for students are greater development of independent learning skills, less affected by absenteeism, able to build a deeper understanding of topics. (Nyoman Yuliantini, 2023).The flipped classroom is a strategic style that helps faculty meet the expectations of future's students while optimizing teaching and classroom resources. The blended learning approach of the flipped classroom can be leveraged for both individual courses and on an organizational level to improve instructional delivery and enhance student achievement and satisfaction. The design and application of the project-based flipped classroom can significantly improves students' learning interest, practice ability and cooperation ability, project-based flipped classroom solves the contradiction between the large amount of content and the less amount of class time (Niepin,2020).For vocational school students, who often need strong practical and communicative skills, this approach provide an effective way to enhance both language proficiency and practical skills. Therefore, it is essential to explore the impact of the flipped classroom teaching on English learning in Chinese vocational schools.

Drawing from constructivist learning theory, this study aims to investigate the current application of flipped classroom teaching in English learning in Chinese vocational schools and to analyze the impact of flipped classroom teaching on students' English learning outcomes. It formulates more targeted policies to support interdisciplinary co-operation and resource integration in English education in vocational schools.Meanwhile, this study encourages the implementation of personalized teaching in English to improve student learning outcomes and satisfaction and provide cases and methods for the application of diverse learning environments to help teachers better utilize informal learning environments to enhance students' learning outcomes. In addition, it provides specific strategies for teaching to help teachers better integrate resources from related disciplines to enhance students' comprehensive quality. It enriches the theoretical system of teaching pedagogy and promotes the development of educational psychology and educational methodology.

The findings of this study not only extend the theoretical discourse on flipped classroom teaching but also offer a foundation for future research and practical innovation in English

learning within Chinese vocational schools. This study provides personalized learning method to meet students' individual needs and interests, enhances students' learning motivation and satisfaction. This study emphasizes more practical opportunities to improve students' hands-on skills and teamwork through flipped classroom teaching and multicultural learning environments. In addition, it can help students understand flipped classroom teaching method and apply their knowledge into practice and improve their English proficiency, learning motivation, communication competence and comprehensive quality. This study expands research on the application of classroom teaching method in English, fills the gaps in existing research and provides empirical research on the teaching resources and the design of personalized teaching and learning method to support the development of related theories and innovation of different teaching methods. This study contributes to enriching the theoretical framework in educational psychology and pedagogy.

Literature Review

Theoretical Review

The flipped classroom teaching method is an innovative teaching method that inverts the traditional teaching, usually through short video lectures or readings and using classroom time for active, collaborative learning activities (Bishop & Verleger, 2013; Abeysekera & Dawson, 2015). The Flipped Learning Network defines it as an approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter (Flipped Learning Network, 2014).

Drawing from constructivist learning theory, as advanced by Piaget and Vygotsky, the flipped classroom emphasizes that learners actively construct knowledge through social interaction and guided support (Vygotsky, 1978; Piaget, 1972). Piaget's notion of cognitive conflict and Vygotsky's Zone of Proximal Development (ZPD) offer theoretical foundations for flipped classroom design, in which peer collaboration and scaffolded activities during class promote deeper learning and language acquisition (Lo & Hew, 2017). A core premise of the flipped classroom is that by engaging with content before class, students come prepared for more meaningful in-class interactions. Activities often include peer tutoring, problem-based learning, group discussions, and collaborative projects that nurture critical thinking and communicative competence. This approach transforms the traditional teacher lectures, students listen paradigm into a student-centered learning environment, where teachers act as facilitators, providing personalized feedback and guidance during in-class activities (Chen Hsieh, Wu, & Marek, 2017).

In Chinese vocational schools, the flipped classroom has shown particular promise. It increases engagement and motivation by encouraging pre-class preparation and participation in communicative exercises (Lin & Hwang, 2018). It also reduces English learning anxiety, as students can process new content at their own pace before class, thus boosting their confidence and comprehension (Zainuddin & Perera, 2019). Furthermore, it enhances critical thinking and collaboration, as classroom time is dedicated to higher-order tasks such as analysis, synthesis, and problem-solving in group settings, while offering flexibility for personalized learning (He et al., 2022). The flipped classroom model not only boosts the

frequency and diversity of language use in class but also fosters English proficiency, learning motivation, communication competence and comprehensive quality ,aligning with the goals of English learning in Chinese vocational schools.

Research Status at Home and Abroad

In recent years, flipped classroom teaching method group cooperative teaching method, as a teaching strategy that emphasizes student' learning motivation, communication competence and comprehensive quality , has garnered widespread attention in global educational research. Foreign scholars have extensively explored its application effectiveness across different academic stages and disciplines based on constructivist learning theory. Studies indicate that flipped Classrooms benefits both students and teachers. It benefits for students are greater development of independent learning skills, less affected by absenteeism, it can build a deeper understanding of topics. (Nyoman Yuliantini, 2023). Ramen (2021) emphasis that students positively evaluate the use of the flipped classroom. The students who learned to use the Blended Learning Model with the Flipped Classroom Method had better individual values and qualities.(Natalija SevincTarik, 2024). Mustafa Cevikbas&Gabriele Kaiser (2020) concluded in Student Engagement in a Flipped Secondary Mathematics Classroom that flipped learning pedagogy has the potential to play a positive role in behavioral, cognitive, and emotional engagement as it provides learners with many possibilities for the learning of mathematics. Flipped classroom teaching method is highly effective in developing the social and cognitive skills of vocational school students. Researchers suggested that workshops and conferences should be organized to train vocational school English teachers to use flipped classroom teaching method in their teaching.

At the domestic level, although non-Western educational systems represented by China have gradually begun to pay attention to theoretical research and teaching practices of lipped classroom teaching method , systematic empirical studies remain relatively scarce compared to international part. Existing research predominantly focuses on primary and secondary schools, with insufficient exploration of group cooperative teaching applications in vocational education, particularly its role in enhancing students' English proficiency, learning motivation, communication competence and comprehensive quality. Additionally, domestic research still has limitations in theoretical integration, with inadequate adaptation of theories such as constructivist learning theory to local background. Overall, recent studies in China indicate growing recognition of the flipped classroom teaching method's potential in English learning in Chinese vocational education. A January 2024 quasi-experimental study found that flipped classroom teaching significantly improved English learning self-efficacy among higher vocational college students, enhancing both their academic confidence and motivation (Discover Education, 2024) . In the context of vocational schools, Jouryabi (2019) evaluated the model with prospective flight attendant trainees and observed that while both flipped and traditional classrooms led to learning gains, higher-achieving students benefited more, suggesting the need to consider learner proficiency in implementation design. Gong (2024) conducted applied research in vocational English classes and reported that the flipped model notably increased student interest, improved academic performance, and promoted critical thinking and problem-solving skills, underscoring its pedagogical advantages in vocational settings. These studies indicate that flipped classroom teaching fosters not only English

proficiency but also learning motivation, communication competence and comprehensive quality. Further research is needed to optimize its implementation in different context.

Limited Research on Vocational Education

Current research on the impact of flipped classroom teaching method on English learning predominantly focuses on primary schools or higher education, particularly in theoretical studies and empirical analyses where substantial achievements have been made. However, in the field of vocational education, especially at the level of vocational schools, relevant research remains insufficient. Compared to the general education system, vocational education has its unique teaching objectives and student characteristics, such as greater emphasis on practical skills development, uneven student foundations, and relatively weaker learning motivation. These features determine that teaching methods suitable for general schools may not be directly applicable to vocational education. However, systematic studies on its applicability and actual effectiveness in vocational schools remain under-researched. Therefore, it is necessary to explore more appropriate teaching strategies tailored to vocational education

Lack of Long-Term Evaluation

Long-term evaluation is essential to fully understand the effectiveness of the flipped classroom teaching method. Future research should not only investigate its immediate outcomes on students' academic performance but also explore its sustained impact on the development of key competencies, such as critical thinking, problem-solving, collaboration, and learning. Additionally, longitudinal studies could provide valuable insights into how continuous exposure to the flipped classroom teaching method influences students' adaptability, lifelong learning habits, and English skills in real-world contexts. Therefore, the long-term impact of flipped- classroom teaching method on students' abilities should be studied.

Multicultural Environments Should be Studied

The influence of multicultural environments on the effectiveness of the flipped classroom teaching method remains largely unexplored. Differences in cultural backgrounds, communication styles, and learning preferences may shape students' levels of engagement, interaction patterns, and comprehensive learning outcomes. Students from cultures with a strong emphasis on teacher authority may initially struggle with the autonomy and active participation required in flipped classroom learning, while students from more collaborative learning traditions may adapt more readily. Additionally, cultural variations in language proficiency, technological familiarity, and perceptions of peer collaboration can further influence how students benefit from flipped classroom activities. These complexities highlight the importance of conducting cross-cultural and comparative studies to better understand how the flipped classroom model can be adapted to diverse educational contexts, ensuring its effectiveness for students from various backgrounds.

Research Objectives and Questiones

RO:(1).To investigate the current application of flipped classroom teaching in English learning in Chinese vocational schools.(2).To analyze the impact of flipped classroom teaching on students' English learning outcomes.RQ:(1).What is the current application of the flipped classroom in English learning in Chinese vocational schools?(2). How does the flipped classroom teaching approach influence students' English learning outcomes ?

Methodology

This study chose 100 students from Zhengzhou Urban Rail Transit Vocational School. as the research subjects, covering the students from different grades and majors, who have learned "Basic English for Vocational School", "Professional English for Urban Rail Transit", "English for Aviation Service" and "Practical English".The population is divided into different levels according to the characteristics of grade level, and then a sample is randomly selected from each grade.This study adopted quantitative method. A scientifically designed questionnaire can systematically reflect the research variables, with content that closely matches the research theme, providing a reliable foundation for in-depth exploration of the impact of flipped classroom teaching on English learning in Chinese Vocational schools. This study implemented a four-week teaching intervention in selected English courses prior to conducting surveys. This study employs a survey questionnaire as the research tool, which is both based on thorough consideration of the research objectives and issues, and fully leverages the advantages of questionnaires in large-scale data collection, variable quantification, and group comparative the current application of the flipped classroom in English learning in Chinese vocational schools and how the flipped classroom teaching approach influence students' English learning outcomes. With a clear structure and high content relevance, it systematically reflects impact of flipped classroom teaching on English learning in Chinese Vocational schools.

Data Analysis Method

This study selected SPSS software for statistical analysis of collected questionnaire data. Through reliability and validity testing, we validated the internal consistency and structural rationality of the questionnaire scale. Descriptive statistics were used to examine students' basic demographics and overall variable levels. Independent samples t-tests were conducted to compare differences in learning interest and perceived cooperation among different student groups. Correlation analyses explored the relationship and influence between group cooperative teaching method and English learning interest The multifunctional statistical capabilities of SPSS enabled effective data analysis, supporting the achievement of research objectives and resolution of research questions, while ensuring systematicness, scientific rigor, and data-driven precision throughout the research process.

Findings

Descriptive Statistics

100 valid questionnaires were obtained, see *Table 4.1* for details

Table 4.1

Basic indicators

name	sample capacity	least value	crest value	average value	standard deviation	median
sex	100	1.000	2.000	1.440	0.499	1.000
grade	100	1.000	3.000	1.940	0.802	2.000

As can be seen from the above table. In terms of gender, the sample consisted of 51% male and 49% female participants. Participants were from three different grades, with 30% in grade one, 35% in grade two and 35% in grade three.

Reliability and Validity Test

Table 4.2.1

Cronbach reliability analysis

Cronbach reliability analysis			
name	Total correlation of correction items (CITC) ^②	The α coefficient of the item is deleted ^③	Cronbach α coefficient ^④
In this course, I think my English level has been greatly improved.	0.933	0.911	
2. Through participating in the teaching practice of flipped classroom, I learned how to apply English theory to practical teaching.	0.668	0.926	
3. The teaching method of flipped classroom helps me to understand the learning objectives and expected results of each course more clearly.	0.757	0.921	
4. Participating in the teaching of flipped classroom makes it easier for me to understand and master the creative expression skills of English.	0.778	0.921	
5. Improved ability to collaborate in a project team.	0.642	0.927	0.930
The teaching method of flipped classroom stimulated my interest in learning English.	0.733	0.923	
The teaching method of classroom flipping has improved my English application ability.	0.713	0.924	
I think my learning has become more meaningful and practical in the process of implementing flipped classroom.	0.695	0.925	
I believe that the teaching mode of flipped classroom is of great significance to my English career development.	0.661	0.926	
10. The flipped classroom has helped me better plan and manage my learning process.	0.685	0.925	

Note: Standardized Cronbach α coefficient = 0.930^⑤

As can be seen from the above table, the Cronbach α coefficient of the questionnaire is 0.93, which is greater than 0.7, so it shows that the reliability of the research data is high, and the reliability of the questionnaire is acceptable, which can be used for further analysis.

Table 4.2.2

Validity analysis results

Validity analysis results		
name	Factor loadings λ factor 1	Common degree (common factor variance) λ
In this course, I think my English level has been greatly improved.	0.952	0.906
2. Through participating in the teaching practice of flipped classroom, I learned how to apply English theory to practical teaching.	0.735	0.540
3. The teaching method of flipped classroom helps me to understand the learning objectives and expected results of each course more clearly.	0.809	0.655
4. Participating in the teaching of flipped classroom makes it easier for me to understand and master the creative expression skills of English.	0.830	0.689
5. Improved ability to collaborate in a project team.	0.706	0.499
The teaching method of flipped classroom stimulated my interest in learning English.	0.792	0.627
The teaching method of classroom flipping has improved my English application ability.	0.774	0.599
I think my learning has become more meaningful and practical in the process of implementing flipped classroom.	0.755	0.571
I believe that the teaching mode of flipped classroom is of great significance to my English career development.	0.727	0.529
10. The flipped classroom has helped me better plan and manage my learning process.	0.748	0.560
Characteristic root (before rotation) λ	6.173	-
Interpretation rate of variance (%) (before rotation) λ	61.726%	-
Cumulative variance explained rate (%) (before rotation) λ	61.726%	-
Root of features (rotated) λ	6.173	-
Interpretation rate of variance (%) (rotated) λ	61.726%	-
Cumulative variance explained rate (%) (rotated) λ	61.726%	-
KMO price λ	0.926	-
Bartles spherical value λ	669.205	-
df λ	45	-
p price λ	0.000	-

Note: Blue indicates that the absolute value of load coefficient is greater than 0.4.

Validity research is used to analyze whether the items in a study are reasonable and meaningful. Validity analysis employs factor analysis as a data processing method, conducting comprehensive evaluations through indicators such as KMO values, common factor variance explained, and factor loadings to verify the validity level of the data. The KMO value is used

to assess the suitability of information extraction, common factor variance are used to eliminate unreasonable items, variance explained indicates the level of information extraction, and factor loadings measure the correspondence between factors (dimensions) and items. As shown in the table above: all items' common factor variance greater than 0.4, indicating that the information from the items can be effectively extracted. The KMO value is 0.929, which is greater than 0.6, suggesting that the data can be effectively extracted. The variance explained by the factors is 61.726%. This means that the information of the research item can be effectively extracted.

Differential Analysis

t test analysis results

	Gender (mean ± standard deviation)		<i>t</i> ²	<i>p</i> ²
	Women (n = 56)	Males (n = 44)		
In this course, I think my English level has been greatly improved.	3.89±0.93	3.89±0.89	0.035	0.972
2. Through participating in the teaching practice of flipped classroom, I learned how to apply English theory to practical teaching.	3.86±0.80	3.95±0.83	-0.595	0.553
3. The teaching method of flipped classroom helps me to understand the learning objectives and expected results of each course more clearly.	4.05±0.94	3.86±0.90	1.018	0.311
4. Participating in the teaching of flipped classroom makes it easier for me to understand and master the creative expression skills of English.	3.95±0.75	4.02±0.88	-0.469	0.640
5. Improved ability to collaborate in a project team.	3.84±0.89	4.00±0.78	-0.947	0.346
The teaching method of flipped classroom stimulated my interest in learning English.	4.00±0.95	3.91±0.80	0.507	0.613
The teaching method of classroom flipping has improved my English application ability.	4.02±0.88	4.11±0.81	-0.557	0.579
I think my learning has become more meaningful and practical in the process of implementing flipped classroom.	3.89±0.89	4.11±0.87	-1.246	0.216
I believe that the teaching mode of flipped classroom is of great significance to my English career development.	3.98±0.82	3.89±0.84	0.573	0.568
10. The flipped classroom has helped me better plan and manage my learning process.	4.02±0.86	4.11±0.84	-0.557	0.579

* $p < 0.05$ ** $p < 0.01$

As can be seen from the above table, the paired t-test is used to study the differences of experimental data. As can be seen from the above table: in all 10 questions, the *p* value is > 0.05 , indicating that gender has no influence on question 1-10. There is no significant

difference between male and female feedback data.

Interpretation of Research Results

This study examined the impact of flipped classroom teaching method on English learning among vocational school students through a survey questionnaire. The results show that the application of flipped classroom teaching method in vocational school significantly enhances students' English learning interest, particularly in learning motivation, classroom participation, self-directed learning, and peer interaction. Compared to traditional teacher-centered teaching, flipped classroom teaching method can effectively stimulate learning motivation, communication competence and comprehensive quality, increasing their engagement with learning tasks. This study indicate that the flipped classroom model has been increasingly implemented in English learning within Chinese vocational schools; however, the degree of adoption and integration varies significantly across institutions. Schools with stronger technological infrastructures and better-trained teachers are more successful in incorporating flipped classroom teaching method while others remain reliant on traditional teaching methods. This study analyzed English learning from multiple dimensions, including cognitive interest, emotional interest, and sustained interest, revealing that flipped classroom teaching method has significant advantages in enhancing English learning among vocational students. Nonetheless, the findings also reveal several challenges: some students lack the self-discipline necessary to complete pre-class learning tasks, and many teachers encounter difficulties in designing engaging digital content or balancing technological tools with sound teaching strategies. The findings of this study not only validate the effectiveness of flipped classroom teaching method in enhancing English learning among vocational school students but also provide a multi-dimensional analysis of its operational mechanisms. The findings provide practical guidance for vocational school teachers to optimize classroom structures, promote student participation, and improve teaching outcomes in actual teaching practices. Furthermore, it also establishes theoretical foundations for future further research that focus on the detailed dimensions related to English learning among Chinese vocational school students.

Advantages and Limitations

This study focuses on vocational school students, filling the gap in current educational research that has rarely addressed the level of vocational education. Compared to previous studies primarily centered on ordinary primary and secondary schools or universities, this study is more closely with the practical needs of vocational education, making it highly relevant and valuable for practical application. The flipped classroom teaching method can stimulate their enthusiasm for active participation. This teaching method is particularly suitable for vocational students, who are characterized by strong practical skills and diverse learning motivations, providing an effective path to improve classroom teaching quality. This study not only extend the theoretical discourse on flipped classroom teaching but also offer a foundation for future research and practical innovation in English learning within Chinese vocational schools.

This study only selected students from some vocational schools in a certain region as samples, with limited sample size and coverage, which may introduce regional biases. The research findings should be used cautiously when generalizing to other regions or different professional groups of vocational high school students. This study conducted teaching

interventions and assessments over a relatively short period, primarily reflecting changes in short-term learning interest, without examining the long-term impact of flipped classroom teaching methods on English learning in Chinese vocational schools. The measurement of student learning interest mainly relies on questionnaires, which inherently carries subjectivity. Although scientific scales have been used, the results may not fully reflect the actual situation due to limitations in students' self-awareness and communication ability. The effectiveness of flipped classroom teaching method largely depends on teachers' organizational capability and students' cooperative attitudes. Differences in implementation strategies and classroom management capabilities among different teachers may affect the stability of the teaching method.

Suggestions on Teaching Methods

Future teaching methods should place greater emphasis on the context of vocational education, exploring how the flipped classroom can be adapted to meet the unique needs, learning characteristics, and employment goals of vocational students. In addition, long term studies are needed to examine the sustained effects of this method on students' English proficiency, learning motivation, communication competence and comprehensive quality, providing deeper insights into its long-term impact. Moreover, the influence of multicultural factor should be investigated to better understand how diverse learning environments shape the effectiveness of flipped classroom practices and to inform the development of more inclusive teaching strategies. At the same time, personalized feedback and incentives should be provided for different performances. A variety of evaluation methods should be used to assess both the process and outcomes of students.

Conclusion

This study investigated the current application of the flipped classroom in English learning within Chinese vocational schools and analyzed its impact on students' learning outcomes. The findings demonstrate that the flipped classroom teaching method has been increasingly adopted, though its implementation varies across institutions depending on technological resources, teacher training, and instructional design quality. When effectively applied, the flipped classroom significantly enhances students' English proficiency, particularly in listening and speaking, and fosters higher levels of learning motivation, communication competence, and comprehensive qualities, such as collaboration, problem-solving, and critical thinking. The research further confirms that the flipped classroom aligns well with the practical and employability-oriented goals of vocational education, offering a more interactive and learner-centered approach compared to traditional teacher-centered instruction. However, there are challenges including students' lack of self-discipline in pre-class preparation, teachers' difficulty in developing high-quality digital resources, and inconsistent institutional support. Overall, the flipped classroom provides a promising pathway to improve both language learning and practical skills of students in vocational school.

In order to maximize the benefits of the flipped classroom in vocational English teaching, coordinated efforts from institutions, teachers, and students are essential. Vocational schools should enhance institutional support by improving technological infrastructure, integrating flipped classroom teaching method into curricula, and offering professional development for teachers. Teachers need to strengthen their skills in digital methods and differentiated teaching to design engaging pre-class materials and foster more interactive in-class activities,

while incorporating timely feedback to build students' learning habits. Students should cultivate stronger time management and autonomous learning skills to fully engage with tasks and classroom activities, thereby enhancing both language proficiency, learning motivation, communication competence and comprehensive quality. Future research should include longitudinal studies to assess the sustained impact of flipped classrooms on English learning, as well extend to other subjects, exploring the possibilities and integration paths of group cooperative teaching interdisciplinary, promoting systematic reforms of teaching methods in Chinese vocational schools.

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