

# The Effectiveness of the Incentive Autonomous Learning Strategies (IALS) Module to Improve Chinese Non-English Major Undergraduates' EFL Speaking Proficiency

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**Abstract**—Very limited research has examined the application of the Incentive Autonomous Learning Strategies (IALS) module to improve the speaking proficiency of English as a foreign language (EFL) among Chinese non-English major undergraduates at a public university in China. Thus, this study attempted to bridge this gap by incorporating autonomous learning with incentive strategies to enhance Chinese non-English major undergraduates' EFL oral performance. Utilising a quantitative research approach, this study adopted a quasi-experimental design to carry out a 14-week intervention. The participants were purposively sampled with the experimental group undergoing the IALS speaking intervention, while the control group received conventional in-situ teaching approaches. A pretest and post-test were conducted on both groups to examine any changes in their speaking proficiency before and after the intervention. Results obtained from the paired-sample t-test demonstrate a statistically significant increase in the experimental group's EFL oral performance, rising from a mean score of 50.52 before the intervention to 71.60 after the intervention. The control group's mean score also improved from a pretest mean score of 51.08 to a mean score of 54.98 in the posttest. These results suggest that the IALS module has proven to be efficacious in improving Chinese non-English major undergraduates' EFL speaking proficiency. It is hoped that the results of this study might provide insights into the effective strategies to enhance English speaking skills among Chinese non-English major undergraduates in EFL contexts.

**Index Terms**—Chinese non-English major undergraduates, English as a foreign language (EFL), the IALS module, speaking proficiency

## I. INTRODUCTION

With the rapid evolution of the global economy, there has been an increasing emphasis on nurturing qualified talents with an international vision in higher education worldwide. In alignment with the ongoing development of the global economy, the Ministry of Education in China has initiated the Outline of the National Medium and Long-Term Education Reform and Development Plan (2020-2030), which highlights the urgency and significance of enhancing China's overall educational level and influence around the world and fostering many talents with a deep understanding of international norms and the ability to engage in international affairs and negotiations effectively. This aligns with the notion that students should develop a global vision and engage in cross-cultural communication and exchange. In this context, the acquisition of English language skills goes beyond enhancing the linguistic competence; it serves as a bridge for communication, enriching students' learning experiences, broadening their horizons, shaping their character, and advancing both cognitive development and spiritual maturity. Within the realm of education, English plays an instrumental role in propelling the internationalization of China's education system.

## II. LITERATURE REVIEW

### A. English Teaching in China

In 2018, the Ministry of Education in China explicitly stated that one of the objectives of English education is to enhance students' holistic English competence, with a stress on listening and speaking (College English Course

Teaching Requirements (trial), 2018).

In China, English education mainly covers four stages. Primary school with a span of six years starts pupils' English journey in the first stage. Specifically, the year to receive English education in primary school either from Grade one or Grade three, depends on the educational policy of different regions in China. English teaching and learning during this period are characterized by a relatively loose and less focused approach, as language skills and knowledge are revisited in greater detail during junior middle school (Chen, 2016).

The second stage is junior middle school, where students are taught for 3 years. The first stage and the second stage together are regarded as Compulsory Education in China, in other words, the Chinese government affords the education tuition for all the students within these two periods. After this, students need to pay themselves if they would like to pursue further education. The effectiveness of English-speaking teaching during the second period is limited as well (Chen, 2016; Bu, 2018), as speaking instruction primarily manifests in students' engagement with question-answering, reading, and recitation of textual content (Xiao, 2017).

The third stage is high school, also with a span of three years. At the end of this stage, students need to take the College Entrance Examination (CEE), a pivotal determinant for university admission. Under the influence and pressure, teachers equip students to achieve high scores for entrance into the ideal university, thus, speaking skills receive minimal emphasis, resulting from the omission of speaking assessment in the final scoring of CEE (Liu, 2018).

The fourth stage is college education. College English as a compulsory course is learned by Chinese EFL non-English majors in the first two years (two semesters per year). Within this college period, they need to participate in College English Test Band-4 (CET-4) during June or December after the first semester's study, a biannual examination administered by Chinese officials. Some Chinese universities promulgate rules that EFL non-English majors must possess a CET-4 certificate to qualify for a college diploma. Confronted with the burden to excel in CET-4, students often marginalize the skill of speaking, owing to its absence from final examination assessments in CET-4, which may be caused by the inherent challenges in evaluating it objectively and the temporal constraints in testing all participants (Wang & Chen, 2023). In general, the historical underemphasis on speaking instruction in China can be ascribed to various factors (Zhang, 2019).

### *B. Target Language Speaking*

Speaking, as the carrier of language, plays an indispensable role in language acquisition. Researchers asserted that speaking within an EFL context is more challenging than other skills such as reading, listening, and writing (Rao, 2018; Hutabarat & Simanjuntak, 2019). It is not easy to convey opinions or thoughts by using a foreign language, since speakers need to master a series of intricate language skills including but not limited to vocabulary, pronunciation, intonation, and stress. Consequently, speaking skills, manifesting an individual's holistic English level and capability to some extent, hold the most significant position among the various linguistic skills (Hemamalini, 2017). Many researchers, both from China and abroad, have underscored the critical role and need for in-depth research into speaking teaching (Dang, 2016; Lartha, 2012; Hughes, 2012; Lukitasari, 2018).

Despite the important role of speaking in language learning, many EFL students still face challenges in learning it well in China (Guo & Wen, 2017). As mentioned above, English education in China spans from primary school to higher education, however, the neglect of speaking teaching and learning has always existed during this process. In primary school, teachers and students don't attach importance to English, due to the repetition of the same content in middle school. In middle or high school, the concern is focused on listening, writing, and reading rather than speaking, as CEE excludes speaking in its scoring (Li & Tan, 2018). Once entering the university, most EFL non-English majors display diminished enthusiasm for dedicating time to English speaking (Jiang, 2020), as CET-4 doesn't incorporate speaking scores within its assessment criteria (Wang & Chen, 2023). In such circumstances, students lost interest in learning speaking and their speaking performance was not satisfactory (Huang, 2021).

There are multiple factors leading to Chinese EFL non-English major students' low speaking performance (Hu, 2016; Wang, 2018), among which, autonomous learning, as one of the learning approaches, plays the motivating role of propelling students to manage their learning process with appropriate learning methods in foreign language acquisition (Jia, 2018), besides that, incentive strategies as one of the instructional strategies are effective in stimulating and developing students from various dimensions (Zhou, 2022). The subsequent sections highlight the significance of these two influential factors sequentially.

### *C. Autonomous Learning*

Autonomous learning refers to the capacity to take charge of one's learning process (Littlewood, 2009). Consequently, learner autonomy is conceptualized as an individual's capability, quality, and mindset (Macaskill & Taylor, 2010). Psychologists in the cognitive area have reached a consensus about the close relationship between learner autonomy and learning achievements (Siew et al., 2016; Shu, 2020). Many previous studies also demonstrated that an individual's levels of autonomy are positively associated with his/her language acquisition (Littlewood, 2009; Carr, 2019; Denovan, 2021). Therefore, a deficiency of autonomous learning ability can be one factor resulting in a moderate English-speaking level. Ushioda (2016) held the opinion that cultivating learner autonomy can not only meet different individuals' learning needs, and generate active and optimistic learning attitudes, but establish a foundation for conducting further effective learning independently and critically.

Based on the scholars from linguistics and education (Ellie, 2021; Baleghizadeh & Nasrollahi, 2014), besides the learning approach, teaching strategies are also important factors affecting students' speaking performance. The following section expounds the incentive strategies by Zhang (2022), Gan (2020), and Wang (2022) utilized in this study.

*D. Incentive Strategies*

Incentive strategies refer to the employment of specific ways or techniques by tutors to inspire student interest, passion, and dedication to enhance learning effects and achieve teaching objectives (Zhang, 2022). The deployment of such strategies is inextricably linked with learners' learning approach (Limeranto & Bram, 2022). Based on previous theories of incentive strategies, the researcher adapted and integrated the incentive strategies by Zhang (2022), Gan (2020), and Wang (2022) that primarily involve the five aspects as follows: interest, participation, goal, confidence, and emotion, to assist Chinese EFL non-English major students' language acquisition journey from various dimensions. In this study, each of the incentive strategies is utilized in different stages of pre-class, in-class, and after-class learning. Besides, these strategies are further situated within the context of the autonomous learning approach, thus the module is also named as Incentive Autonomous Learning Strategies (IALS) module.

Specifically, interest incentive strategies aimed to arouse students' learning interest and curiosity through the pre-learning videos, learning materials, and learning tasks in each unit that were prepared deliberately to fit young undergraduates' favor of fashion, new trends, and innovation (Kashinathan, 2021).

Participation incentive strategies were manifested in pre-learning activities, in-class tasks, and after-class extensions provided for students to engage in each lesson. Active participation in these speaking activities can increase students' opportunities to practice speaking (Zhou et al., 2022), develop collaborative spirits among peers or groups (Wael et al., 2018), and establish self-confidence and a sense of belonging (Gan, 2020).

Goal-based incentive strategies involved setting task-based learning goals in pre-class, in-class, and after-class settings, encouraging students to undertake their speaking autonomous learning with the learning objectives as the driving force (Eltina, 2023).

Concerning confidence-based incentive strategies, the researcher consolidated students' self-assurance in their own English learning by inspiring students' active engagement and efforts in the learning tasks, helping them recognize that practice is instrumental in confidence-building, and giving enough encouragement and praise to them as long as they try and devote in the speaking task regardless their speaking levels (Paneerselvam & Mohamad, 2019).

Emotion incentive strategies strived to provide emotional support (trust, encouragement, and praise) for students in language acquisition (Zakaria et al., 2019). The researcher allowed students considerable independence in conducting autonomous learning and extended backing and approval when they faced challenges or uncertainties in speaking English.

*E. Theoretical Framework of the Study*

The theoretical framework is constructed by integrating Butler's (2015) Autonomous Learning Structure in the classroom with incentive strategies proposed by Zhang (2022), Gan (2020), and Wang (2022). This integration results in the development of the incentive autonomous learning strategies (IALS) model that aims at improving Chinese non-English major undergraduates' EFL speaking proficiency in the current research. The application of the five incentive strategies is incorporated into six steps of autonomous learning, with the goal of stimulating students' speaking development. The theoretical framework of the current study is illustrated in Figure 1.

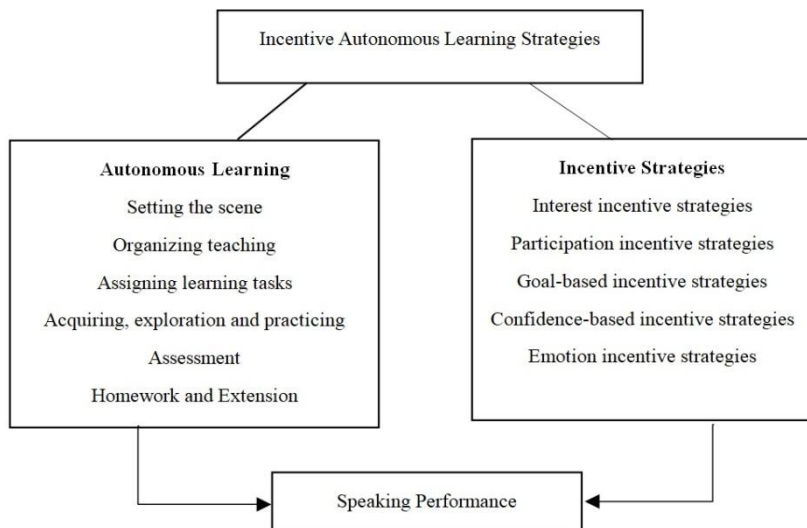


Figure 1. Theoretical Framework of the Study  
Source: adapted from Butler (2015), Zhang (2022), Gan (2020) and Wang (2022)

Relevant research consistently affirms that effective speaking training among college students is a key solution for enhancing their speaking competence (Anjaniputra, 2013; Safari, 2016; Safiyeh & Mohammed, 2020). Speaking instruction helps revise students' inaccurate expressions, fosters their logical thinking, and instills positive self-consciousness and self-confidence (Wang, 2014). Additionally, targeted instructional scaffolding effectively guides students through the process of comprehending the content of the learning texts, leading to the attainment of optimal learning outcomes (Joannes & AlSaqqaf, 2023). However, reviewing relevant research on teaching speaking modules reveals a notable scarcity of studies investigating students' variation in EFL speaking performance. Specifically, very few studies have been carried out to examine the impact of employing incentive autonomous learning strategies with a particular emphasis on students' linguistic and affective perspectives within an empirical framework.

In response to this research gap identified in the relevant literature, the current study developed the IALS teaching speaking module. The aim was to enhance EFL speaking performance among Chinese non-English major undergraduates at a Chinese public university by emphasizing key factors such as students' interests, goals, participation, confidence, and emotions in speaking learning.

#### *F. Research Question and Research Hypotheses*

The analysis of relevant research demonstrated that the IALS teaching speaking module can effectively address students' challenges and difficulties in speaking English (Gou, 2018). In the current study, the following research question was employed to assess the effectiveness of the IALS module:

RQ1. Does the IALS intervention help improve the Chinese non-English major undergraduates' EFL speaking proficiency at a public university in China?

In alignment with the research question, two hypotheses were formulated as follows:

H<sub>0</sub>: There is no significant difference in the EFL speaking proficiency of the control group among Chinese non-English major undergraduates before and after the regular instruction.

H<sub>1</sub>: There is a significant difference in the EFL speaking proficiency of the experimental group among Chinese non-English major undergraduates before and after the IALS intervention.

### III. METHODOLOGY

#### *A. Research Design and Sampling Technique*

The study employed a quantitative research approach through a quasi-experimental research design to collect and analyze the data (Cohen et al., 2017). The participants of this study were selected using a purposive sampling technique and divided into two groups: the control group and experimental group. While the control group received conventional in-situ teaching methods, the experimental group underwent a 14-week IALS speaking intervention. All data were collected and analyzed through the speaking pretests and posttests conducted before and after the intervention, aiming to understand participants' actual speaking performance.

#### *B. Research Instruments*

The scores obtained from both the speaking pretest and posttest were compared to assess whether students demonstrated an improvement in their speaking performance. The speaking tests used in the current study were adapted from a previous assessment designed for EFL non-English major students at Baoding University. Students were randomly assigned a presentation topic from a pool of 10 topics.

The IALS intervention, one of the research instruments in the current study, was implemented over 14 weeks, comprising a total of 21 hours exclusively dedicated to the experimental group. The IALS intervention aimed to improve the experimental students' EFL speaking skills and performance. Further details of the intervention are elaborated in the implementation section below.

#### *C. Participants*

As previously mentioned, a purposive sampling technique was adopted for its convenient access to the students in current research (Cohen et al., 2017; Ke & AlSaqqaf, 2023). The sample consisted of EFL non-English majors from the Faculty of Teachers' Education at Baoding University. A total of 95 first-year took part in this study, with 42 students forming the experimental group, and 53 students for the control group.

An independent-sample t-test was conducted on the pretest mean scores of both groups to evaluate their EFL speaking proficiency. Results showed no significant difference ( $p = .82$ ) in the mean score of the pretest taken by both groups. This suggests that both groups shared a similar level of EFL Speaking proficiency (refer to Table 5).

The analysis of the collected data shows the descriptive profile of the sample's EFL learning experiences is presented in Table 1.

TABLE 1  
DESCRIPTIVE PROFILE OF THE STUDY SAMPLE

Class	Male	Female	Age	Years of English language learning (9-13 years)	Years of English language learning (6-8 years)
Experimental Group (N= 42)	6 14.3%	36 85.7%	17-22	38 90.48%	4 9.52%
Control Group (N= 53)	18 34.0%	35 66.0%	17-22	48 90.57%	5 9.43%

D. Pilot Study

To verify its feasibility, The IALS teaching speaking module underwent a pilot study involving 40 EFL non-English major students (Fraenkel et al., 2019) at Baoding University who were not participants in the main study. Following the established teaching plan, the 40 students were instructed in two sessions spanning a total of three hours. During the pilot study, students engaged in autonomous learning with incentive strategies to complete the corresponding learning tasks. At the end of the pilot study, three students were randomly selected for interviews regarding the learning tasks and objectives. The three interviewees reported a clear understanding of learning contents and expressed a desire to participate in the intervention, citing its innovative and interesting nature.

E. Implementation of the IALS Module

After being piloted, the 14-week IALS intervention was implemented on the experimental group during the first semester of the 2023-2024 academic year at Baoding University. Meanwhile, the control group underwent 14 weeks of regular speaking instruction. The implementation of the IALS intervention in the experimental group was demonstrated in a mini-talk show, which included pre-learning preparations, themed speech tasks through in-class autonomous learning and exploration, and knowledge extension through after-class learning in each unit. These encouraging outcomes suggest that the majority of the experimental group students were able to follow the instructional pace and complete the corresponding tasks in a timely and effective manner. They showed familiarity with the learning approach, comprehension of the learning contents, and the ability to generate meaningful learning output.

IV. RESULTS AND DISCUSSION

A. Results

The research question of this study (i.e., does the IALS intervention help improve the Chinese EFL non-English major undergraduates' speaking performance at a public university in China?) was addressed by conducting an independent-sample t-test and paired-sample t-test to compare the English-speaking pretest and posttest mean scores within the control group and experimental group.

However, before proceeding with the t-tests, certain assumptions needed to be met. According to Pallant (2016), if a sample size in an experiment exceeds 30, violation of this assumption is unlikely to induce any severe problems. In the current research, the sample size for each group is more than 30. Therefore, the independent-sample t-test and paired-sample t-test could be conducted on these two groups.

(a). Normality Test

Kolmogorov-Smirnov (K-S) test was conducted to check the assumption of normal distribution of data in the research (Healey, 2015). According to Hair et al. (2014), a *p-value higher than the significant level of 0.05 indicates the normal distribution of data, whereas a p-value lower than it signifies the non-normal distribution of the dataset.*

1. Control Group

As shown in Table 2, the *p-values* of the control group in the pretest and posttest scores are 0.187 and 0.200 respectively, both greater than 0.05. Therefore, the normal distribution for the two datasets is met.

TABLE 2  
RESULT OF NORMALITY TEST OF SPEAKING SCORE (CONTROL GROUP)

Control Group (N=53)	Kolmogorov-Smirnov		
	Statistic	df	Sig.
Pretest Score	0.107	53	0.187
Posttest Score	0.061	53	0.200

2. Experimental Group

As for the experimental group, conducting the K-S test shows that the *p-value* of in the pretest and posttest scores before and after the intervention are 0.090 and 0.200 as shown in Table 3. Both values exceed the significance level, indicating that this pair of datasets is normally distributed.

TABLE 3  
RESULT OF NORMALITY TEST OF SPEAKING SCORE (EXPERIMENTAL GROUP)

Experimental Group (N=42)	Kolmogorov-Smirnov		
	Statistic	df	Sig.
Pretest Score	0.126	42	0.090
Posttest Score	0.053	42	0.200

(b). *Analysis of the Pretest Mean Score Between the Control Group and Experimental Group*

To ensure consistency in comparison and analysis, the two groups underwent the same speaking test before and after the intervention. The full score of the speaking test is 100. The results of the speaking pretest in both groups are presented in Table 4.

TABLE 4  
RESULTS OF THE SPEAKING PRETEST (CONTROL GROUP AND EXPERIMENTAL GROUP)

Groups	Mean	Std. Deviation	Std. Error Mean
Control Group (N=53)	51.08	10.412	1.430
Experimental Group (N=42)	50.52	11.035	1.703

As shown in Table 4, the mean score of the speaking pretest in the control group is 51.08, slightly higher than the experimental group's mean score of 50.52. The control group's mean score during the pretest is marginally elevated compared to that of the experimental group. Overall, this suggests that both groups exhibit comparable level of English-speaking proficiency level.

(c). *Results of Independent-Sample T-Test of Pretest Mean Score Between the Experimental Group and Control Group*

Results obtained from the independent-sample t-test showed a significance value of 0.803, which is higher than the cut-off of 0,05. This indicates that the difference in the two groups' speaking performance during the pretest is not significant. This statistical evidence supports the similarity of these two groups' speaking performance during the pretest. The independent-sample t-test result of speaking pretest in both groups is presented in Table 5.

TABLE 5  
RESULTS OF INDEPENDENT-SAMPLE T-TEST OF PRETEST MEAN SCORE (CONTROL GROUP AND EXPERIMENTAL GROUP)

Pretest	Levene's Test for Equality of Variances		t-test for Equality of Means	
	F	Sig.	Df	Sig.(2-tailed)
Equal variances assumed	.05	.82	93	.803
Equal variances not assumed			85.65	.805

(d). *Analysis of the Speaking Performance in the Control Group During Pretest and Posttest*

In Table 6, the mean score of the speaking pre-test of the control group is 51.08, while the posttest is 54.98. The control group's posttest mean score is slightly higher than the pretest mean score.

TABLE 6  
RESULTS OF THE SPEAKING TEST (CONTROL GROUP)

Control Group (N=53)	Mean	Std. Deviation	Std. Error Mean
Pretest Score	51.08	10.412	1.430
Posttest Score	54.98	10.600	1.456

(e). *Testing  $H_0$*

A paired-sample t-test was conducted to investigate the presence of any significant change between the pretest and posttest mean scores within the same group in the current study. As indicated in Table 7, the Sig. (2-tailed) value is 0.000, which is lower than the cut-off of 0.05. This demonstrates that there is a significant difference between the control group's pretest and posttest of speaking performance. Accordingly, the null hypothesis ( $H_0$ ) stating that there is no significant difference in the EFL speaking performance of the control group among Chinese non-English major undergraduates before and after the regular instruction is rejected in the current study.

TABLE 7  
RESULTS OF PAIRED-SAMPLE T-TEST (CONTROL GROUP)

Pair 1 Control Group (N=53)	Mean	Std. Deviation	95% Confidence Interval of the Difference		t	Sig. (2-tailed)
			Lower	Upper		
Pretest-Posttest	-3.90	1.757	-4.390	-3.421	-16.183	0.000

(f). Analysis of the Speaking Performance in the Experimental Group Before and After the Intervention

As shown in Table 8, the experimental group’s mean score in the speaking pretest is 50.52, while that in the posttest is 71.60. It can be noticed that the experimental group’s mean score after receiving the IALS intervention is considerably better than the mean before the intervention.

TABLE 8  
RESULTS OF THE SPEAKING TEST  
(EXPERIMENTAL GROUP)

Experimental (N=42)	Mean	Std. Deviation	Std. Error Mean
Pretest Score	50.52	11.035	1.703
Posttest Score	71.60	11.723	1.809

(g). Testing  $H_1$

The results obtained from the paired-sample t-test carried out for the experimental group show that the Sig. (2-tailed) value is 0.000 below 0.05 as demonstrated in Table 9. This confirms that the difference between the mean scores of the speaking pretest and the speaking posttest in the experimental group is statistically significant. Therefore, the alternative hypothesis ( $H_1$ ) stating that there is a significant difference in the EFL speaking performance of the experimental group among Chinese non-English major undergraduates before and after the IALS intervention) is accepted in this research.

TABLE 9  
RESULTS OF PAIRED-SAMPLE T-TEST (EXPERIMENTAL GROUP)

Pair 1 Experimental Group (N=42)	Mean	Std. Deviation	95% Confidence Interval of the Difference		t	Sig. (2-tailed)
			Lower	Upper		
Pretest-Posttest	-21.071	3.815	-22.260	-19.883	-35.793	0.000

B. Discussion of RQ

The pretest mean scores in both groups (refer to Table 4) reveal that the participants’ speaking performance falls below the passing mark of 60/100. This result aligns with the findings of several studies on Chinese students, such as Qian (2021), Lv (2014), and Chen (2018). Qian (2021) argued that despite the favorable scores in the English test paper, Chinese EFL students often face challenges in spoken English. While possessing knowledge of certain words, phrases, or sentences, students encountered difficulties in expressing themselves with suitable and precise expressions or structures on various occasions. Lv (2014) and Chen (2018) both stated that a common speaking problem of Chinese EFL non-English major learners is the frequent use of Chinglish expressions, making it difficult for others to understand their intended message.

One justification for this unsatisfactory speaking performance among Chinese EFL non-English major undergraduates can be attributed to the prolonged neglect of speaking teaching in college English courses and the absence of speaking tests in formal English examinations. Additionally, the lack of a conducive environment to speak English in China can be another factor resulting in the weakness of English speaking (Chen, 2018; Qian, 2021). More importantly, it has been observed that the predominant cause of low English-speaking performance among Chinese EFL non-English majors is their inner fear of speaking English (Zhang, 2018; Zhou, 2019). They worry about making mistakes and are reluctant to speak English, a phenomenon supported by previous research (Wu, 2016; Tao, 2018; Zhang, 2019).

After the 14 weeks of regular speaking instruction, the control group’s speaking performance improved from the pretest mean score of 51.08 to the posttest mean score of 54.98. Additionally, the statistics of paired-sample t-test in the control group revealed a significant difference between the control group’s pretest and posttest mean score. This implies that the conventional teaching method contributes to an enhancement in the control group’s speaking performance. However, the improvement is modest compared with the experimental group’s great increase in the mean score during the pretest and posttest.

On the other hand, the experimental group’s posttest mean score (71.60) significantly surpasses its pretest mean score (50.52) as evidenced by a statistically significant difference observed through the paired-sample t-test on this group. The remarkable improvement of more than 20 points in the experimental group’s speaking performance after the intervention underscores the role and significance of the IALS teaching speaking module in enhancing students’ English-speaking skills. One of the primary contributors to such a substantial increase can be attributed to the utilization of autonomous learning. In the current research, autonomous learning provided students with more freedom and independence to explore their speaking knowledge and skills using the methods they preferred, thereby fostering the initiatives and potentials of students with different learning levels. This aligns with the findings of Spratt (2017), who emphasized that autonomous learning benefits both the educators and students, as it prioritizes students’ self-control and independent learning in the learning process.

Furthermore, the application of five incentive strategies under the instructor’s clear guidance in the current study

constitutes another influential factor contributing to the improvement of speaking performance. These five incentive strategies played a positive role in enhancing students' linguistic competence by stimulating their interest in participation, setting proper learning goals, and reinforcing their self-consciousness and self-confidence through emotional support. This is consistent with the findings of Qian (2021), who stressed that the effective use of strategies in teaching modules can significantly contribute to the realization of the expected teaching outcomes. Lastly, the well-designed IALS module, incorporating various speaking activities and tasks, along with engaging learning materials prepared for learners, might also exert a positive influence on students' English-speaking abilities. This result is in line with the findings of teaching experiments conducted by Chinese researchers and instructors as demonstrated by Zhang (2019) and Chen (2018). Both Zhang (2019) and Chen (2018) emphasized the necessity of constructing a teaching module with a comprehensive understanding of the target students and research purpose. Based on this understanding, corresponding strategies, appropriate activities, and enjoyable learning materials can be developed to address research issues purposefully and effectively. Therefore, the effectiveness of the IALS teaching speaking module in enhancing the speaking proficiency among Chinese EFL non-English major undergraduates has been validated through the comparison and analysis of the mean scores of the pretest and posttest scores of the experimental group and control group respectively.

#### V. THEORETICAL AND PRACTICAL IMPLICATIONS OF THIS STUDY

This study addressed the research gap in speaking performance through an empirical research method by the utilizing IALS teaching speaking module among Chinese EFL non-English major undergraduates in China. It aims to draw attention to the role of effective speaking intervention in addressing actual speaking problems and difficulties among this population (Li, 2020; AlSaqqaf et al., 2023) and propose a long-term strategy for innovating EFL instruction and learning (Nhi & AlSaqqaf, 2023).

The current research has developed the IALS teaching speaking module as a remedial measure to enhance the EFL speaking proficiency of the Chinese non-English undergraduates. Understanding the importance of speaking competence in foreign language teaching and learning is crucial for both EFL teachers and learners (Zhang, 2019). It is also essential to recognize the necessity of adopting effective strategies to enhance speaking competence, as effective methods can pave the way for positive learning outcomes (Li, 2020; Song, 2020). Despite the perceived complexity of acquiring spoken English for EFL learners, providing them with appropriate guidance, encouragement, and support, along with stimulating their learning enthusiasm using effective methods, can lead to positive and confident engagement in EFL speaking learning (Denovan, 2021). Following the measurement of the effectiveness of the IALS module in the current research, it is hoped that other EFL instructors will consider it as a reference for further speaking teaching and, based on it, propose more effective measures to enhance the teaching effectiveness of English speaking.

#### VI. CONCLUSION

This study investigated the effectiveness of the IALS module in improving the speaking performance of Chinese EFL non-English major undergraduates at a public university in China. The findings reveal a significant enhancement in the speaking performance of the experimental group after the IALS teaching treatment, compared to the control group's modest improvement following regular speaking instruction. As a result, this research provides valuable insights into the potential impact of the IALS module for both EFL educators and learners. The hope is that the results of this research will draw attention to effective instructional approaches and strategies for enhancing speaking skills among Chinese EFL non-English major undergraduates.

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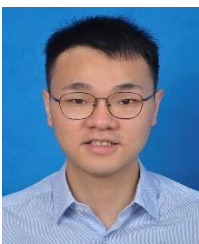
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