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Educational Effectiveness and Improvement Strategies of EMI in Chinese Higher Education

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Abstract: This study examined the effectiveness of English medium instruction (EMI) within the context of Chinese higher education. The research data were primarily collected through student opinion surveys conducted at Shandong University of Science and Technology (SDUST). The results indicate that EMI has yielded positive outcomes, particularly in enhancing students' English proficiency. However, it has also generated negative effects on content knowledge acquisition and comprehension. Based on these findings, the study proposes several policy recommendations for optimizing EMI implementation in Chinese higher education.

Keywords: English medium instruction; EMI; Higher education; China

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1. Introduction

As an important part of educational internationalization, English medium instruction (EMI) has evolved into a global trend. China also needs to keep up with the trend of educational internationalization. As early as 2001, the Chinese Ministry of Education proposed that "undergraduate education should create conditions to use foreign languages such as English for public and professional courses." In 2007, the Ministry of Education proposed to build 500 national bilingual education courses. In July 2021, Tsinghua University announced that 700 professional courses would be taught through EMI, accounting for approximately 43% of all courses. In China, EMI is generally still in its infancy, except for a few universities such as Tsinghua University, Peking University, Fudan University, and Shanghai Jiao Tong University, where EMI has developed slightly earlier.

2. Literature review

In the review literature, Coleman summarized the early development of EMI in European higher education

[1]. The EMI Research Center showed that the main difficulties in EMI were the lack of sufficient competent EMI professors (83.6%) and the lack of formal teaching guidance (60%) [2]. Ernesto Macaro et al. believed that due to deficiencies in research methods, there was currently insufficient evidence to show that EMI reduced understanding depth while improving English proficiency [3]. Diane Pecorari and Hans Malmstrom further pointed, there was a symbiotic relationship between these two goals, and improving English proficiency was the secondary [4]. Ernesto Macaro and Ikuya Aizawa investigated the overlap and divergences between EMI and EAP/ESP [5]. Guangwei Hu identifies challenges and conundrums in EMI in Chinese higher education [6].

In empirical analysis, the most representative ones are the three large-scale surveys on European EMI conducted by Maiworm and Wächter. The number of English teaching programs (ETP) increased from 725 (accounting for 2%–4%) in 2002 to 2,389 (accounting for 7%) in 2007, to 8,089 in 2014 [7]. Peter Wingrove and Beatrice Zuaro (2025) show, in the academic year 2023/2024, A total of 24,043 ETP were identified. EMI is mostly practiced at the master's level, while "business and management", "engineering and technology", and "computer science and IT" are the most popular disciplines [8]. In domestic research in China, a substantial body of literature remains limited to rudimentary summaries of teachers' experiential practices in EMI courses, with relatively scarce theoretical or empirical findings.

3. Effectiveness of EMI on a course level

3.1. Course background

Shandong University of Science and Technology (SDUST) is a high-level university with about 39,800 full-time students, and is where two authors of this paper are currently employed. Since 2000, SDUST has been actively promoting bilingual education. As an incentive, teachers engaged in bilingual education are provided with an additional 30% workload subsidy. In 2019, the university took a further step by encouraging EMI. Teachers involved in EMI courses are now eligible for an extra 200% workload subsidy. Simultaneously, a formal EMI accreditation system was established. Professors are required to either have more than two years of overseas experience or pass internationally recognized English language proficiency tests such as IELTS or TOEFL. Additionally, an expert assessment serves to ensure the quality and effectiveness of the EMI courses.

To explore the effectiveness of EMI, the authors conducted a three-year continuous follow-up study on an EMI course and administered a questionnaire survey to approximately 114 students. The students are from a Sino-foreign cooperation program. As stipulated in the cooperation agreement and required by the Ministry of Education (MOE), 1/3 of professional courses are taught by foreign instructors, and another 1/3 are delivered through EMI or BE by domestic professors. Most students show a strong enthusiasm for further study abroad and have achieved a slightly higher level of English proficiency. Annually, over 40% of the students choose to pursue a master's degree overseas.

3.2. Analysis on survey

The students are required to take Microeconomics via EMI, with no alternative Chinese-language courses. Based on surveys conducted since the fall semester of 2022, the data collected is shown in **Table 1**.

Table 1. Students' opinions on the effectiveness of EMI courses

Item	1st semester 2022				1st semester 2023				1st semester 2024				Average mean
	Class3 n=26		Class4 n=22		Class3 n=21		Class 4 N=24		Class3 n=25		Class4 n=23		
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	
Overall, I am satisfied with these EMI courses	4.77	0.24	4.72	0.40	4.38	0.80	4.63	0.42	4.28	1.15	4.57	0.82	4.56
Students' self-evaluation of their English proficiency	-	-	-	-	1.77	1.20	2.96	1.73	2.80	1.84	3.21	1.45	2.71
My English improved after taking this EMI course, and in the following areas	4.42	0.58	4.37	0.83	-	-	-	-	4.04	1.10	3.64	1.32	4.12
(1) Reading comprehension	-	-	-	-	4.13	0.85	4.38	0.52	3.88	1.09	3.76	1.26	4.04
(2) Listening	-	-	-	-	4.15	0.70	4.09	0.90	4	1.05	3.76	1.26	4.00
(3) Speaking	-	-	-	-	3.68	1.30	4.21	0.80	3.88	1.18	3.48	1.32	3.82
(4) Writing	-	-	-	-	-	-	-	-	3.88	1.28	3.56	1.33	3.73
(5) Professional English for special purposes	-	-	-	-	4.05	0.89	4.26	0.67	3.97	1.19	3.78	1.25	4.02
I would require less time to study if this course were taught in Chinese	4.34	0.77	4.40	0.67	4.24	0.77	3.93	1.26	4.36	0.94	4.13	0.81	4.23
It would be much easier to understand the subject matter if this course were taught in Chinese	4.53	0.54	4.31	0.81	4.42	0.61	4.16	0.80	4.6	0.51	4.35	0.78	4.40
My biggest challenge lies in the fact that I have to spend a considerable amount of time reading English textbooks.	-	-	-	-	4.1	0.83	3.84	1.20	4.16	1.09	4	1.10	4.02
My biggest problem lies in my inability to understand in class.	-	-	-	-	3.48	1.25	3.49	1.38	3.88	1.25	3.61	1.27	3.62
I had difficulty understanding the lecture due to my lack of English proficiency	3.62	1.49	3.54	1.35	3.45	1.44	3.41	1.41	4.16	0.89	3.61	1.27	3.64
I had difficulty understanding the lecture due to the professor's lack of English proficiency	2.15	2.86	2.26	2.39	2.38	2.10	2.58	2.10	2.68	1.90	2.52	2.10	2.43
To take this EMI course, I need to improve my English abilities in the following areas													
(1) Reading comprehension	4.54	0.47	4.55	0.55	4.62	0.35	4.38	0.86	4.52	0.40	4.18	0.79	4.46
(2) Listening	4.57	0.45	4.49	0.77	4.57	0.47	4.63	0.42	4.6	0.44	4.21	0.87	4.51
(3) Speaking	4.58	0.37	4.49	0.77	4.24	0.89	4.42	0.58	4.36	0.52	4.1	0.84	4.41
(4) Writing	4.5	0.48	4.41	0.74	4.33	0.55	4.46	0.50	4.24	0.83	3.7	1.26	4.28
Chinese online courses have significantly enhanced my comprehension of EMI courses.	4.69	0.30	4.63	0.44	4.71	0.29	4.55	0.53	4.56	0.46	4.31	0.73	4.57

3.2.1. Satisfaction with EMI courses

Overall, the students were satisfied with these EMI courses, which can be inferred from their average rating of 4.56 on a Likert scale of 1–5, with 5 being most satisfactory. On the other hand, the students did not perceive their professors' lack of English proficiency as an obstacle to understanding, for their average rating for this

item was 2.43 on a Likert scale of 1–5, with 5 indicating great difficulty.

3.2.2. Difficulties with EMI courses

The students generally exhibited relatively low self-evaluations on their English proficiency, with a mean rating of 2.71 on a 5-point Likert scale (where 5 represents "excellent"). When asked whether their limited English ability had hurt their understanding of content, respondents reported with an average score of 3.64 (on a scale where 5 indicates "great difficulty"). To effectively participate in EMI courses, students expressed a strong consensus regarding the need to enhance their English proficiency. They further ranked the influence of various language skills on course understanding in the following order: listening (4.51) > reading (4.46) > speaking (4.41) > writing (4.28). Despite these challenges, students indicated that they could comprehend most of the EMI course material, as reflected in an average rating of 3.62 (with 5 representing "significant difficulty"). However, they identified the primary obstacle in EMI courses as the substantial time occupied by textbook reading, which received a rating of 4.02 on the same scale.

3.2.3. Effectiveness with EMI courses

The students' responses to surveys also show that if this course were taught in Chinese, they would spend much less time preparing for it (average rating: 4.23) (**Table 1**). Moreover, their understanding of the subject would be greater (average rating: 4.40). In other words, the students felt that EMI was, to some extent, impeding their knowledge acquisition. This seems to be in line with the findings that "EMI can reduce knowledge comprehension."

Students acknowledge the effectiveness of EMI courses in enhancing English proficiency, giving them an average rating of 4.12. They also believe that the levels of improvement in different aspects of English are as follows: reading (4.04) > professional English for special purposes (4.02) > listening (4.00) > speaking (3.82) > writing (3.73). Among these, there are no significant differences in the improvement of reading ability, professional English for special purposes, and listening ability through EMI courses.

3.3. Supplementary interviews

Since student questionnaires could not adequately reflect whether course difficulty had been compromised, the authors conducted in-depth interviews with teachers responsible for EMI courses. Instructors acknowledged that, due to limited proficiency in English among both faculty and students, the depth and complexity of knowledge delivered in EMI classes had been reduced by approximately 15% to 30% on average. In response, supplementary Chinese-language online courses were developed to support instruction. Students widely endorsed these resources, which included pre-class video lectures, post-class assignments, and online discussions of current topics. They reported that the auxiliary materials improved their comprehension in the English-medium environment and enhanced their post-class understanding of the subject matter. The students' satisfaction rating for the Chinese online courses was 4.57 out of 5.

4. Analysis of improvement strategies

4.1. Avoid one-size-fits-all mandatory policies and provide multiple options

The implementation of EMI in Chinese higher education inevitably follows a "government-guided" model, characterized by top-down policy impetus. However, it is crucial to avoid coercive measures in its execution.

Instead, appropriate incentives should be provided to faculty members, enabling them to voluntarily adopt EMI while adequately compensating for their additional efforts. Students should be clearly informed about the required English proficiency levels for EMI participation and permitted to make autonomous choices. The evaluation process must abandon quantity-oriented metrics and prioritize the quality of EMI courses.

4.2. Applying Chinese-language online courses to support EMI

Since student questionnaires did not adequately capture potential compromises in course difficulty, the authors conducted in-depth interviews with faculty members engaged in EMI instruction. The interviewed instructors acknowledged that during EMI delivery, constrained by both their own limited English proficiency and students' comprehension challenges, the depth and complexity of knowledge transmission were significantly reduced. Faculty estimated this reduction to average approximately 15% to 30% compared to courses delivered in the native language.

Consequently, corresponding Chinese-language online courses were implemented as supplementary resources. Based on this framework, students widely endorsed these Chinese online courses, including pre-class video lectures, post-class assignments, and online discussions on hot issues. These resources significantly enhanced students' comprehension within the English environment. Student evaluation ratings for these Chinese online courses averaged 4.57 out of 5 points.

4.3. Emphasis on EMI implementation conditions

Many educators and students have reported that EMI courses demand excessive time and effort while presenting substantial challenges. Scholars generally concur that while EMI enhances professional English proficiency, it simultaneously carries the significant drawback of reducing comprehension of course content. In-depth analysis reveals that this is primarily due to inadequate implementation conditions and a lack of corresponding support measures.

4.3.1. Qualified EMI instructors

EMI instructors are required to possess both professional knowledge and strong English proficiency. The current pool of EMI instructors typically consists of two main categories: native English-speaking foreign teachers and local Chinese faculty who have obtained degrees from English-speaking countries or possess overseas academic experience. Native English-speaking foreign teachers with high academic achievements in their fields are both costly and scarce, unable to meet the substantial domestic demand. Meanwhile, the population of Chinese faculty who have obtained degrees from English-speaking countries has increased annually. Furthermore, supported by national and local government funding initiatives, the number of Chinese teachers with overseas academic experience has risen significantly. These domestic faculty members are poised to become the primary source of EMI instructors in China. Consequently, appropriate screening mechanisms and specialized EMI teaching training programs remain essential.

4.3.2. Students' English proficiency

EMI imposes substantial demands on students' English proficiency. In China, students typically receive 10 years of English instruction prior to university enrollment. The importance of English learning has gained increasing recognition, as evidenced by the rise in average TOEFL scores from 79 in 2016 to 87 in 2021. However, China's English education has historically emphasized vocabulary memorization and grammatical accuracy at

the expense of communicative competence and reading proficiency. Consequently, many university students lack fundamental English communication skills essential for meeting EMI course requirements. To address these deficiencies, reforms in the primary and secondary English teaching system are essential to systematically enhance students' English reading and communicative abilities.

Simultaneously, given the significant variation in students' English proficiency, EMI courses should be offered alongside bilingual or native-language parallel classes, allowing students to choose based on their readiness. English ability-based class grouping is also a viable option, as smaller class sizes facilitate interactive teaching and increase opportunities for students to use English in the classroom. However, it is crucial to ensure consistent grading standards to prevent students from strategically selecting bilingual or native-language courses solely for the purpose of achieving higher academic scores, thereby ensuring the integrity and equity of the educational assessment system.

4.4. Providing support measures

4.4.1. EMI teacher training

Language Training: University faculty in China typically hold doctoral degrees and can read specialized academic literature independently. Their main challenges lie in the oral output of disciplinary knowledge and daily academic communication in English. Generally, an intensive 3–6 month training program focused on English output should be able to quickly stimulate and improve their English expression skills.

Pedagogical Skills Training: Local educators transitioning to EMI often make certain "mistakes." A common misconception involves attempting to emulate native-speaker teaching styles by prioritizing fluency and rapid delivery, when in fact EMI often requires deliberate pacing and simplified vocabulary to enhance student comprehension. Another frequent issue is the tendency to overemphasize the accurate delivery of content in English at the expense of student engagement. This approach can inadvertently transform the classroom into a teacher-centered monologue, diminishing opportunities for meaningful interaction. In reality, employing specific techniques to engage students can not only help them practice their English expression but also reduce their sense of frustration in EMI courses and boost their confidence.

Current Status and Recommendation: However, standardized EMI training is still lacking in China. Since 2016, Tsinghua University has been sending faculty annually for a two-week short-term EMI training program at the EMI Research and Development Center of the University of Oxford. 15 teachers were sent in 2016 and 40 in 2017. The University of Oxford's EMI teacher training serves as an excellent model, and a domestic EMI teacher training system should be established as soon as possible.

4.4.2. EMI teaching evaluation

Portfolio Materials: typically include the course syllabus, PowerPoint slides, teaching plans, student assignments, exams, exam analyses, and student evaluations.

On-site Evaluation: requires experts to observe and assess the teaching process, which places higher demands on the English proficiency of administrators.

Evaluation Standards: Clear evaluation standards for EMI courses should be established, while simultaneously allowing for a certain degree of flexibility. The permitted flexibility means that, while ensuring English is used for over 90%, local teachers are permitted to use a minimal amount of Chinese, for example, providing the Chinese translation of key professional English terms, using Chinese for the final summary to enhance student comprehension depth.

4.4.3. Providing EMI learning support

Through dedicated language centers, free English classes, writing courses, and even one-on-one tutoring should be offered. Furthermore, graduate students from the same discipline can be hired as teaching assistants for EMI courses to provide tutoring for students struggling with the material.

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Author contributions

Ping Yu analyzed the data and wrote the paper. Xiaoyan Yu conceived the idea of the study.

References

[1] Coleman JA, 2006, English-medium Teaching in European Higher Education. Language Teaching, 2006(39): 1–14.

[2] Dearden J, 2016, English Medium Instruction: A Growing Global Phenomenon. https://www.researchgate.net/publication/309230956

[3] Macaro E, Curle S, Pun J, et al., 2017, A Systematic Review of English Medium Instruction in Higher Education. Language Teach, 51(1): 36–76.

[4] Pecorari D, Malmstrom Hm 2018, At the Crossroad of Tesol and English Medium Instruction. Tesol Quarterly, 52(3): 497–515.

[5] Macaro E, Aizawa I, 2024, English Medium Instruction, EAP/ESP: Exploring Overlap and Divergences in Research Aims. International Journal of Applied Linguistics, 34(4): 1352–1367.

[6] Hu G, 2023, English as a Medium of Instruction in Chinese Higher Education: Looking Back and Looking Forward. Applied Linguistics Review, 14(6): 1617–1625.

[7] Wachter B, Maiworm F, 2014, English-taught Programmes in European Higher Education: The State of Play in 2014. Lemmens, Bonn.

[8] Peter W, Beatrice Z, Dogan Y, et al., 2025, English-medium Instruction in European Higher Education: Measurement Validity and the State of Play in 2023/2024. Applied Linguistics, 2025: 1–23.