

Exploring Bilingual Instruction for Intermediate Microeconomics in the Context of Sino-Foreign Collaborative Education

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Abstract: With the establishment of intermediate microeconomics courses in an increasing number of economics majors at universities, its importance is becoming more prominent. This article analyzes the current situation and existing problems of bilingual teaching in intermediate microeconomics. It also proposes improvement suggestions for bilingual teaching in intermediate microeconomics under Sino-foreign collaborative education, addressing aspects such as teaching mode innovation, teaching team building, bilingual teaching differentiation, and diverse process assessments.

Keywords: Sino-foreign collaborative education; Intermediate microeconomics; Bilingual teaching

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1. Overview of intermediate microeconomics course

Intermediate microeconomics is an advanced Western economics course built upon the foundational principles of economics. It is primarily designed for undergraduate instruction during the fifth semester, featuring 54 to 64 teaching hours. Microeconomics, a subset of Western economics, focuses on analyzing the economic behavior of individual entities. It explicates the formation of price mechanisms and guides market entities toward effectively allocating scarce resources.

Intermediate microeconomics delves into economic phenomena with greater rigor and detailed discussions, applying the principles learned in foundational courses. Students are required to possess logical and abstract thinking abilities along with a strong mathematical foundation.

Teaching microeconomics can be challenging in economics majors, and intermediate microeconomics serves as a bridge between introductory concepts and advanced theories. The foundational course allows students to grasp basic economic ideas through numerous familiar economic phenomena. In contrast, the intermediate course, situated between basic and advanced levels, emphasizes quantitative analysis, theoretical completeness, and logical reasoning.

Intermediate microeconomics should not merely present theory formally but should also avoid being

overly abstract, staying connected to reality. The predominant methods involve logical reasoning, utilizing equation descriptions and quantitative graphical models. Compared to introductory courses, intermediate microeconomics is more theoretical, incorporating mathematical and graphical tools. Students are expected to master these tools, understanding the policy implications conveyed by graphical representations, which might make the course seem more formally structured and potentially less engaging.

2. The current situation and existing problems of bilingual teaching in intermediate microeconomics

2.1. The current situation of students in Sino-foreign collaborative education

In recent years, an increasing number of universities, including both “Double First-Class” institutions and local application-oriented universities, have embraced the Sino-foreign collaborative education model ^[1]. Schools of different levels employ various Sino-foreign collaborative education models, each imposing distinct quality requirements on students. This article specifically focuses on local applied universities.

Most prevalent among current Sino-foreign collaborative education models is the establishment of Sino-foreign collaborative education institutions or projects, exemplified by the Jinan Campus of Shandong University of Science and Technology. Since 2007, collaborations with institutions such as the North Melbourne Institute of Technology (NMIT) in Australia, Cambridge College in the United States, the University of Tasmania in Australia, Clark University in the United States, and the University of Worcester in the United Kingdom have been ongoing. In 2020, with the approval of the Ministry of Education, the Swinburne College of Shandong University of Science and Technology was established as a non-independent legal entity under the jurisdiction of Shandong University of Science and Technology.

Recent years have witnessed the admission of high-quality students into Sino-foreign collaborative education programs, with admission extending to the second batch of undergraduate students. The average ranking of college entrance examination scores in the province hovers around 170,000. This article, however, narrows its focus to research on students in the second batch of undergraduate collaborative education. Despite being admitted in the same batch, these students exhibit significant differences in scores, levels of learning initiative, and English proficiency.

Taking finance major students collaborating with the University of Worcester in the UK as an example, this major comprises 105 students across four classes. One class boasts a passing rate of approximately 96% in the English CET-4 exam, while the remaining classes exhibited relatively poorer passing rates.

2.2. Dominance of classroom teaching with limited variation

In comparison to other courses, intermediate microeconomics exhibits a more extensive teaching arrangement, varying between 54 and 64 hours or even more in some institutions. The primary focus lies in classroom teaching, utilizing a combination of multimedia presentations and traditional blackboard writing.

However, this method has notable drawbacks:

- (1) Passive knowledge reception: Unlike flipped classrooms where students take a more active role, the current approach results in passive knowledge reception. While students can pose questions in the classroom, participation levels remain relatively low. This lack of engagement may lead to inattention and distractions, such as students using their phones.
- (2) Unsatisfactory teaching effect: The complex and intricate nature of intermediate microeconomics theory makes it challenging to captivate students' interest. Even with case-based teaching intertwined with theoretical explanations, it struggles to counteract the monotony of traditional classroom methods,

and the classroom atmosphere often lacks the desired level of dynamism.

In light of these challenges, it becomes imperative for teachers to diversify their teaching methods and employ various tools. This approach aims to enhance the content of classroom teaching, foster active student participation, and ultimately elevate the overall effectiveness of the teaching process.

2.3. Challenges in bilingual teaching

The intermediate microeconomics program at Shandong University of Science and Technology, catering to finance majors in Sino-foreign cooperative education, employs bilingual teaching methods. On one hand, this approach aids students in establishing a robust foundation in economics. On the other hand, it cultivates a professional language environment, facilitating students' seamless integration into overseas studies and life. Furthermore, the introduction of foreign teaching methods and educational concepts enhances the internationalization level of domestic education. Despite these benefits, the actual teaching process has revealed several challenges:

- (1) Variability in English proficiency: A notable issue arises from significant differences in students' English proficiency. As previously mentioned in the section detailing the current situation of students in Sino-foreign collaborative education, approximately half of the students in the teaching class demonstrate proficient English skills, while others exhibit slight deficiencies in listening, speaking, reading, and writing. The school mandates bilingual teaching, using all-English textbooks, and PowerPoint slides, alternating between Chinese and English during lessons, and employing all-English test papers for exams. This poses a considerable challenge for students with limited English proficiency, hindering their ability to excel in the course.
- (2) Debates over English teaching proportion: In Sino-foreign collaborative education's bilingual teaching, determining the appropriate ratio of English in the classroom remains a contentious issue, particularly for the more challenging intermediate microeconomics course. Some schools enforce a blanket requirement of no less than 50% English teaching ratio for bilingual courses. This mandate, however, appears impractical when not considering the course difficulty and the varying levels of student readiness.
- (3) Limited classroom teaching time: The introductory course for intermediate microeconomics, the primary microeconomics, is entirely taught in English at Shandong University of Science and Technology. After a substantial time gap, students tend to forget key course content. Consequently, teachers must invest significant classroom time in guiding students through a review of previous knowledge, leading to the consumption of valuable instructional time. Even with the allocation of 64 teaching hours for intermediate microeconomics, the schedule feels tight, making it challenging to adhere to the syllabus and incorporate bilingual explanations in both Chinese and English.

3. Suggestions for enhancing the teaching effectiveness of intermediate microeconomics

3.1. Introducing a blended learning model integrating online and offline learning

In the literature, scholars frequently highlight the efficacy of incorporating "micro lessons" as a teaching method^[2]. Central to "micro lessons" is the creation of brief and focused classroom teaching videos, addressing the key and challenging points, alongside supplementary teaching resources such as courseware, practice tests, and online Q&A interactions between teachers and students. This "micro lessons" content can encompass materials such as case studies, exercises, and pre-prepared teaching videos, or utilize existing online teaching resources. Currently, many universities prioritize the development of teaching resources and the implementation

of blended learning models^[3]. Some institutions have produced high-quality online courses and video resources suitable for integration into “micro lessons”.

- (1) Before class: These resources can be uploaded to the online teaching platform in advance, aligning with the course schedule. Students are then expected to complete the online learning components beforehand and can communicate through platform messages.
- (2) In class: During face-to-face sessions, teachers can tailor their instruction based on student messages on the platform, understanding their learning status and addressing existing issues. Beyond traditional methods, teachers can seamlessly incorporate online resources for real-time discussions, encouraging active student participation and enlivening the classroom atmosphere. Simultaneously, online platforms provide a means for teachers to promptly gauge student responses and assess their performance.
- (3) After class: Following each session, a testing segment is integrated into the online teaching platform. This serves a dual purpose: allowing teachers to evaluate students’ grasp of the material and providing a form of teaching feedback for continual course improvement. Additionally, students gain insights into their own learning progress, facilitating targeted reviews.

This blended learning approach, combining both online and offline elements, offers a comprehensive strategy to augment the teaching effectiveness of intermediate microeconomics.

3.2. Recommendations for implementing bilingual teaching in intermediate microeconomics

Given the challenging nature of the intermediate microeconomics course and the diverse English proficiency levels among students, adopting a segmented English teaching approach in bilingual instruction holds significant merit. Adjusting the ratio of Chinese and English in teaching, blackboard writing, and classroom discussions based on the difficulty of the content is a meaningful strategy^[4]. Specifically:

- (1) Teaching basic concepts and principles: For fundamental concepts, principles, and key and challenging points, it is advisable to use Chinese as the primary language. This ensures clarity and comprehension among students.
- (2) Utilizing English for charts and cases: To enhance language proficiency and provide exposure to technical terms, teaching content such as charts and cases can be primarily delivered in English. For instance, the section on the supply and demand model, being relatively straightforward and fundamental to microeconomics, can be predominantly taught in English, with Chinese use as a supplementary aid.
- (3) Balancing Chinese and English in advanced sections: In more complex sections such as consumer theory, competition model, and equilibrium theory, where students may face challenges in comprehension, a higher proportion of Chinese can be employed to facilitate understanding.
- (4) Emphasizing English in discussions and assignments: While conducting classroom discussions and assigning homework, an all-English approach is recommended. This not only reinforces language skills but also gradually familiarizes students with the English teaching environment.

This strategic adjustment not only enhances the overall learning effectiveness for students but also aids in their gradual adaptation to an English-based instructional environment.

3.3. Formation of an economics teaching team

The caliber of the teaching staff holds direct sway over the quality of economics courses, underscoring the need to establish an efficient and innovative economics team. This team approach serves dual purposes.

On one hand, collaborative efforts within the teaching team facilitate the revision of teaching syllabi, lesson preparation, and the creation of a case library for teaching and discussion activities. Leveraging the

experience of seasoned teachers becomes pivotal in mentoring and sharing successful teaching strategies. The synergy from listening to each other's lessons fosters collective progress.

On the other hand, the establishment of a teaching team encourages ongoing communication among members. This communication helps in gaining a clearer comprehension of the economics course content and understanding students' proficiency in fundamental economic knowledge. Such insights enable targeted and effective teaching in advanced economics courses.

Moreover, members of the teaching team can strategically align and establish a common research direction. Collaboratively working towards this shared focus allows for joint applications for teaching and research projects. This not only enhances teaching proficiency but also contributes to an elevated research standard, achieving a symbiotic progression in both domains.

3.4. Diversity of process assessment

The ultimate aim of various optimizations and enhancements in teaching is to empower students to comprehend and master a course, manifesting in their learning outcomes^[5]. The conventional assessment method, reliant on a single exam for grade determination, falls short of igniting enthusiasm and initiative among students. A more holistic process evaluation proves advantageous in fostering sustained student engagement and enthusiasm. Consequently, the emphasis on final exam scores should be reduced, while the proportion of regular grades should be heightened.

Students' course learning assessments can encompass multiple components, including regular assessments, unit tests, mid-term exams, and the final exam. Regular assessments involve evaluating classroom performance, in-class quizzes, homework assignments, and the like. Unit tests encompass knowledge assessments, thematic papers, research reports, and similar evaluations. Ideally, the weight of final exam scores should not exceed 50%, and the number of unit tests should be judiciously determined based on credit allocation and teaching content.

Throughout the entire academic evaluation process, teachers must assess students' academic performance objectively, reasonably, and fairly in each segment. Making these assessments public allows students to promptly gauge their learning progress. Teachers should establish evaluation rules in advance, aligning with the predetermined weightings for each assessment component, ensuring a quantifiable evaluation of each part, and mitigating subjective arbitrariness.

4. Conclusion

The implementation of bilingual and all-English teaching in universities is not only a requisite for advancing Sino-foreign cooperative education models but also aligns with the broader goals of internationalizing higher education and nurturing global talent. Intermediate microeconomics, positioned as a crucial core course within the field of economics, entails abstract and intricate content, coupled with substantial disparities in student proficiency levels.

In navigating the realm of bilingual teaching for this course, educators are tasked with a nuanced analysis of both the subject matter and the student cohort. The judicious utilization of information-based teaching methods and resources becomes imperative. Teachers must meticulously structure and design the teaching content, balancing the proportion of Chinese and English instruction in a scientifically and reasonably crafted manner. Furthermore, incorporating diverse assessment methods is essential.

The key lies in fully engaging and stimulating the enthusiasm and initiative of students. It is through the implementation of such an approach that optimal educational outcomes within the complex realm of

intermediate microeconomics can be achieved.

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