

THE IMPACT OF TEACHERS' OVERSEAS STUDY EXPERIENCES ON EDUCATIONAL QUALITY IN HIGHER EDUCATION INSTITUTIONS

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Abstract: The impact of teachers' overseas study experiences on educational quality in higher education institutions was comparatively investigated in this study. Two teachers at Guizhou Institute of Technology, one with 3.5 years of overseas study experience and a doctoral degree, the other without any overseas experience and a doctoral degree, taught the same course (i.e., Mine Engineering Rock Mechanics) to two parallel classes (i.e., Class 231 and Class 232) from September 2024 to June 2025. The teacher with overseas experience implemented three specific teaching strategies: 1) Introduction of overseas frontier knowledge, 2) sharing of personal overseas experiences, and 3) introduction of renowned international scholars. Results from final examinations show that Class 231 with overseas-experienced teacher achieved a pass rate of 88.57% and an excellence rate of 22.86%, compared to Class 232's pass rate of 87.18% and excellence rate of only 2.56%. While pass rates were comparable, the excellence rate demonstrated a dramatic tenfold difference. These findings provide empirical evidence that teachers' overseas study experiences significantly enhance student learning outcomes, particularly in fostering high-level academic achievement. The paper concludes with recommendations for educational reform and institutional policies to promote faculty overseas study opportunities.

Keywords: Overseas study experience; Teacher quality; Educational quality; Higher education; Comparative study; Teaching reform

1 INTRODUCTION

The globalization of higher education has made the internationalization of academic faculty more important than ever before. Indeed, the focus of higher education globalization has shifted from merely recruiting international students to strategically developing academic faculty as a core element of internationalization [1-2]. Universities worldwide, including those in China, have increasingly prioritized sending teachers abroad for advanced study, degree programs, and research collaborations [3-5]. Guizhou Institute of Technology, as part of China's broader initiative to enhance educational quality in engineering disciplines, has actively encouraged its faculty members to pursue overseas doctoral degrees and research experiences, and has strategically employed staff with international backgrounds.

The study abroad program is regarded as one of the most effective ways to prepare multicultural and global teachers [5]. The program has enhanced teachers' cross-cultural sensitivity and awareness, their understanding of other countries and cultures, as well as their teaching skills and professional development in a structured cross-cultural environment [6]. A survey of approximately 3,000 teachers from universities in Cambodia, Indonesia, Malaysia and Vietnam showed that overseas study experiences significantly enhanced teachers' ability to teach in foreign languages, the construction of international cooperation networks, and their participation in international academic activities [7]. At present, recruiting teachers with overseas study experience and a doctoral degree is a common approach for many universities to enhance their teaching quality. Based on the data of 128 "Double First-Class" universities in China from 2011 to 2020, it was found that the introduction of international faculty significantly enhanced the international academic influence of the universities, and the digitalization level played a moderating role [8].

However, a critical question remains insufficiently addressed by empirical research: Does teachers' overseas study experience actually translate into measurable improvements in student learning outcomes? While existing literature has documented various benefits of overseas experience for teachers themselves, including enhanced content knowledge, pedagogical skills, and intercultural competence, the direct link to student achievement has rarely been tested through controlled comparative designs. The scarcity of direct evidence linking teacher overseas experience to student outcomes constitutes a major gap in the literature, as noted in recent comprehensive reviews. Most existing studies either focus on teacher-level changes without tracing effects to the classroom, or rely on correlational designs that cannot establish causality. Furthermore, few studies have documented the specific teaching strategies through which overseas-experienced teachers translate their international exposure into enhanced student learning. This study addresses these gaps through a quasi-experimental comparative design, holding constant teacher institution, course content, time period, and student population characteristics, isolating overseas study experience as the key independent variable.

2 METHODS

This study employs a comparative quasi-experimental design. As shown in Table 1, two teachers at Guizhou Institute of Technology, matched on key variables, including entry time, institution, and course assignment, differed on the independent variable of interest: overseas study experience. Overseas-experienced teacher A holds a doctoral degree earned through 3.5 years of overseas study. Domestically-trained Teacher B has no overseas study experience. Both teachers joined Guizhou Institute of Technology at the same time and were assigned to teach the same course (i.e., Mine Engineering Rock Mechanics) to two parallel classes (i.e., Class 231 and Class 232). Teacher A taught Class 231 (35 students), and Teacher B taught Class 232 (39 students). Both classes consisted of third-year undergraduate students in mining engineering with comparable entrance academic profiles based on institutional admission records.

Table 1 Variable in This Study

Variable	Teacher A	Teacher B
Overseas study experience	3.5 years, Ph.D. obtained	None, Ph.D. obtained
Entry time	Same	Same
Course taught	Mine Engineering Rock Mechanics	Mine Engineering Rock Mechanics
Assigned class	Class 231	Class 232
Teaching period	September 2024 – June 2025	September 2024 – June 2025

The teaching period ran from September 2024 to June 2025. Both classes completed the same final examination for "Mine Engineering Rock Mechanics," developed collaboratively by the department to ensure content validity and comparability. The examination covered 30% fundamental concepts in rock mechanics, 40% engineering applications and case studies, and 30% problem-solving and analytical questions. Scores were recorded and analyzed to calculate pass rate and excellence rate. The pass rate is defined as the percentage of students scoring ≥ 60 ; and the excellence rate is the percentage of students scoring ≥ 80 .

3 EDUCATIONAL INNOVATION METHODS IMPLEMENTED BY THE OVERSEAS-EXPERIENCED TEACHER

The teacher with overseas study experience (i.e., Teacher A) implemented three specific educational innovation methods derived from the overseas experience. In many higher education institutions, teachers tend to confine their instruction to textbook knowledge and classical theories, with little or no extension to frontier issues. Consequently, students demonstrate significantly low learning motivation and achieve poor learning outcomes. In contrast, the teacher with overseas study experience (i.e., Teacher A) implemented three specific educational innovation methods derived from that overseas experience, as shown in Figure 1.

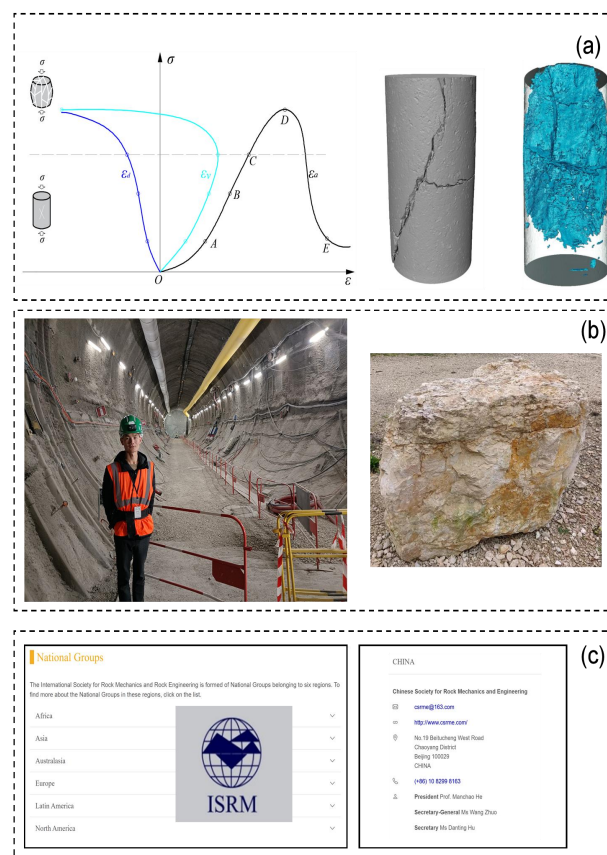


Figure 1 Educational Innovation Methods/Contents Implemented by the Overseas-Experienced Teacher

3.1. Introduction of Overseas Frontier Knowledge

In Figure 1 (a), the first method was the introduction of overseas frontier knowledge. Teacher A incorporated recent research findings from international journals and conferences into the course content, presented case studies from overseas mining operations, and introduced advanced analytical methods not yet widely adopted domestically. Topics included recent advances in rock failure criteria, international best practices in deep mining stability, and computational methods developed at overseas research centers. This method was introduced in approximately 30% of class sessions.

3.2 Sharing of Personal Overseas Experiences

In Figure 1 (b), the second method was sharing personal overseas experiences. Teacher A narrated the personal journey of applying for overseas programs, cultural adaptation, and academic growth; shared practical strategies for overcoming language barriers and research challenges; and provided concrete information about scholarship opportunities and application procedures. This method occupied approximately 5–10 minutes per week, integrated naturally into relevant content.

3.3 Introduction of Renowned International Scholars

In Figure 1 (c), the third method was the introduction of renowned international scholars. Teacher A introduced students to influential scholars in rock mechanics and mining engineering, shared these scholars' research trajectories and major contributions, and connected course content to the work of international experts. Scholars introduced included Dr. E. Hoek (rock engineering classification), Dr. N. Barton (Q-system), Dr. Z.T. Bieniawski (rock mass rating), Dr. Manchao He (President of the China Society of Rock Mechanics and Engineering), and contemporary researchers from Canada, Australia, and Europe. The format consisted of brief biographical segments linking scholars' work to course content, with suggestions for further reading. In contrast, Teacher B used the standard curriculum and teaching methods without these three overseas-derived components.

4 RESULTS

The final examination results revealed notable differences between the two classes (see Table 2).

Table 2 Final Examination Results

Class	All student	Passed student (≥80)	Excellent student (≥80)	Pass rate (%)	Excellence rate (%)
231	35	31	8	88.57	22.86
232	39	34	1	87.18	2.56

For Class 231 taught by the overseas-experienced teacher, 31 out of 39 students passed the examination, resulting in a pass rate of 88.57%. Eight students scored 80 or above, yielding an excellence rate of 22.86%. For Class 232 taught by the teacher without overseas experience, 34 out of 39 students passed, resulting in a pass rate of 87.18%, which is only 1.39 percentage points lower than Class 231. However, only one student scored 80 or above, yielding an excellence rate of only 2.56%. This represents a nearly ninefold difference in excellence rates: students taught by the overseas-experienced teacher were nearly nine times more likely to achieve high-level mastery. The data reveal a clear pattern: While basic competency (passing) was achieved at similar rates across both classes, high-level achievement showed a dramatic disparity favoring the overseas-experienced teacher. This suggests that overseas experience may have a differential effect: Boosting the ceiling of student achievement rather than merely raising the floor. The three teaching strategies employed by Teacher A likely contributed to these results: frontier knowledge helped students connect fundamental concepts to cutting-edge applications; personal experience sharing motivated higher-achieving students to invest additional effort; and introduction of international scholars provided aspirational models demonstrating the global significance of the subject matter.

5 CONCLUSIONS

The impact of teachers' overseas study experiences on educational quality in higher education institutions was comparatively investigated in this study. Main conclusions are summarized as follows:

- 1) Three specific teaching strategies, including introduction of frontier knowledge, sharing of personal overseas experiences, and introduction of international scholars, were proved to be effective mechanisms for translating overseas experience into student learning gains.
- 2) Teachers' overseas study experience significantly enhanced high-level student achievement, as measured by excellence rates (22.86% vs. 2.56%), while basic competency achievement (pass rates) remained comparable across both classes (88.57% vs. 87.18%), indicating that overseas experience did not come at the cost of neglecting average or struggling students.
- 3) The results provide direct empirical evidence linking teacher overseas experience to student examination performance, addressing a gap noted in prior reviews.

4) Based on this study, the institutions should revise teaching evaluation frameworks to include excellence rates or high-achievement indicators, recognizing that overseas-trained faculty may contribute distinctively to developing top students rather than merely raising average performance.

COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

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